



# **Functional Requirements For Army Library Automation**

**Final Report  
16 June 1992**



**Prepared by the Library Automation Working Group  
at the direction of the Army Library Committee**

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| 13. ABSTRACT (Maximum 200 words) The project to define the functional requirements of library systems in the Army was originally initiated to assist in the definition of the Library Installation Support Module, a portion of the Sustaining Base Information System (SBIS). As completed, it defines a base for Army-wide automation of libraries and provides a source document for libraries automating in the future. Librarians can use portions of the functional requirements to compile RFPs, RFIs, and SOWs for local library automation projects.<br>No system covers all the needs of all types of libraries, but many elements are common. For instance, almost all libraries maintain a database of their own book (or other media) holdings. Almost all libraries feel the need to lend their holdings and retrieve them, and keep track of their users. The authors assumed that any future system will be MARC (Machine Readable Cataloging) based, but other citation, full-text, and image files are also proposed. Connectivity to other systems, including other Army, government, bibliographic utility, and commercial databases, are required.<br>This document was developed by the members of the LAWG: E. B. Burgess, P. Alderman, M. Craig, W. Hill, A. Linthicum, P. Pepin, and J. Player. Editing and printing were done at HQ TRADOC, TRALINET Center, Ft. Monroe, VA. |  |   |  |  |  |
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## THE ARMY LIBRARY AUTOMATION PROJECT

The Army Library Automation Project (ALAP) is designed to automate operations of the approximately 300 libraries maintained by the Army. The activities of these libraries are quite diverse. Approximately half are General libraries, the Army's equivalent of public libraries. Many of them are academic and service school libraries, supporting Army training and education activities such as branch schools, CGSC, or AWC. Others are medical libraries, and special libraries with unique missions, such as the library supporting the Military History Institute or the MACOM technical libraries.

Whatever the functional context, library service is a customer-oriented activity. Everything in a library should be designed to swiftly, accurately, and easily deliver the required material to the customers hands. Circulation must be painless and quick. Searching the public catalog, whether automated or not, and any associated files must be intuitive, swift, and robust. At the point of service, library personnel must be able to easily satisfy the common questions customers ask. Whatever the technical or contractual language used, this is the goal.

Although Army libraries are diverse, there are a number of repetitive and routine activities, common to all, which will benefit from automation. Many of those are described in this document. The most obvious to the non-library eye will be the clerical operations inherent in circulation, the card catalog, and the many management information reports which library managers must complete. The backroom activities which make delivery of service to library users possible are at least as important, however, and cannot be ignored in designing a standard service-wide system. These backroom activities relate to the construction of quite large databases in which integrity of data is crucial.

Many Army library activities involve interfaces with other highly automated systems. Systems such as DTIC, RECON, DIALOG, OCLC, and other government and private industry suppliers provide libraries with a variety of information, services, and products vital to the mission of the Army. Any system which attempts to automate libraries must take into account the fact that library service does not mean handling the books on the shelves of a particular building. It means searching throughout the intellectual resources of a nation for the particular bits of information useful to a customer and delivering that information to the customer. Vendors, developers, and purchasers must keep that philosophy firmly in mind.

A cautionary note: this document was originally written for the early stages of development in the effort to produce a library Installation Support Module (ISM). It has since been somewhat adapted such that it can be the basis for an RFP. It should not, however, be used uncritically. Local needs, individual perception of specific features, and time will mandate changes. The discerning reader will notice a number of lacunae. No specific sizing or hardware requirements are included, since these are site-specific. Some readers will feel keenly the lack of CJK features, provisions for classified documents, materials booking, and acceptance test benchmarks, to name a few. For those reasons, this document is available in word processing form. Users will have to modify it to suit their own needs.

Edwin B. Burgess  
16 July 1992

- 1 GENERAL SYSTEM REQUIREMENTS
- 1.1 TURNKEY SYSTEM REQUIREMENT
- 1.1.1 A complete turnkey system shall be installed. ALAP shall consist of hardware; software; installation; database loader programs (and data conversion where necessary); training; documentation; hardware and software maintenance including periodic enhancements and support.
- 1.1.2 Each system shall be capable of operating in a shared or consortium environment with one or more libraries. For that reason, the system shall operate successfully in a multilibrary environment, including two or more different types of libraries.
- 1.1.3 Profiles--Each library or library system will have the ability to initially define and later modify defaults to local requirements by preparing an individual profile. Modification of the profiles shall be possible without programmer interaction.
- 1.1.4 ALAP shall offer the option of maintaining separate files for each library or combining information into system-wide files. In any case, the system shall permit system-wide merged outputs from separate files when required.
- 1.1.5 In a shared database, libraries shall have the option to have their activities independent of all other system members, or have a joint operation. Each member shall have the ability to set its own policies with regard to loan periods, patron expiration date, overdue limits, etc., or have these policies in common with other libraries. However, separate user and transaction history files shall be maintained for each member so that reports specific to a library can be generated. This capability shall apply to all modules.
- 1.1.6 Response time shall be in the 2-5 second range for all activities.
- 1.1.7 ALAP shall have a single operating database for its main bibliographic files, which shall consist of full MARC records. ALAP shall not import MARC records and convert them to another format for the operating database. However, the operating database may have other types of records in it, including specifically COSATI records, which shall

be maintained as COSATI records and not translated.

- 1.1.8 ALAP shall be fully integrated, with all modules sharing a common bibliographic database (except as libraries sharing the system may choose to maintain separate files) and a common user interface throughout the system.
  - 1.1.8.1 As much as possible, the keystrokes for commands shall be consistent among all modules.
  - 1.1.8.2 Screens in each module shall display the most appropriate options at each decision point.
  - 1.1.8.3 The user interface shall be extremely easy to use. The system shall be usable by both staff and customers without staff intervention or instruction or reference to manuals.
  - 1.1.8.4 ALAP shall support retrieval from the authority file thesaurus for search expression formulation, etc.
  - 1.1.8.5 ALAP shall provide, whenever possible, command driven, function key, and menu access. The user shall have an option to use a graphical user interface (GUI). All OPAC search capabilities shall be available in all modules.
- 1.1.9 It shall be possible to move from one module to another without logging off and on, and with a minimum number of keystrokes.
- 1.1.10 ALAP shall operate in a real-time interactive mode with the capability of creating, updating, maintaining and accessing all data for library materials and patrons in real-time.
- 1.1.11 ALAP shall support all standard barcode labels and/or magnetic strips on patron cards, badges, and library materials.
- 1.1.12 It shall be possible to connect the system to local area networks using the TCP/IP protocol suite. The communication standards should support operating systems like X.25 Wide Area Networking (packet switching) and X.400 distributed application services of the International Standards Organization (ISO) Open Systems Interconnection Model (OSI), IBM's standard SNA network architecture, and the TCP/IP protocol suite for network connection through Internet. (See also



material in Section 2 on remote databases and Section 12, Interconnection with Standard Army Systems.)

- 1.1.13 Expansion to include additional features or enhancements, and improvements in technology shall be possible without interruption of the programs already operational.
- 1.1.14 The system shall include a report generator. All reports shall be producible in print and online, and shall be exportable to standard PC formats such as, but not limited to, ASCII, NAVY.DIF, Lotus 1-2-3, dBase III, dBase IV, etc.
- 1.1.15 ALAP shall allow review of all messages by authorized operators before distribution, whether by electronic means or other means.
- 1.2 STANDARDS
  - 1.2.1 ALAP shall have the capability of taking in, retaining, editing, and outputting bibliographic, authority, and holdings data in all current MARC formats.
  - 1.2.2 ALAP shall support the ANSI standard for bibliographic information exchange on magnetic tape (Z39.2).
  - 1.2.3 ALAP shall be capable of taking in, retaining, and outputting serial holdings records in the NISO serials holdings format (Z39.44) as implemented in the MARC serials holdings format at the summary and detail level.
  - 1.2.4 ALAP shall support the computerized book ordering standard EDI X.12.
  - 1.2.5 ALAP shall support the SISAC standard for scanning of machine readable labels on serials issues.
  - 1.2.6 ALAP shall support the X.400 electronic mail standard.
  - 1.2.7 ALAP shall be capable of bibliographical and other data queries against another computer, demonstrating compliance with ANSI Z39.50 computer/computer information retrieval protocol.
  - 1.2.8 ALAP shall demonstrate compliance with the OSI

seven layer reference model.

- 1.2.9 ALA filing rules shall be the standard throughout the system, in displays of bibliographical records, indexes, and all user interfaces with the OPAC and the bibliographic files. Displays in call number order shall display in true shelflist order.
- 1.2.10 The Systems administrator shall have the option of generating customized reports. The following reports shall be available at the time of installation:
  - a. Statistics on individual database searches, how many, how often, how long, etc.
  - b. Number of records retrieved.
  - c. System response time during searches.
  - d. Search statistics will be capable of being sorted in a variety of ways, user name, organization, subject, system, to name a few.
  - e. All search related cost factors should be reported by individual user, user groups, etc.
  - f. Monthly billing notices for appropriate users as identified by operator.
  - g. Statistics on which individual databases are used.

### 1.3 HARDWARE

- 1.3.1 ALAP shall be able to accomodate a doubling of the database size, number of terminals, or activity levels at a given installation without system redesign or hardware replacement.
- 1.3.2 ALAP shall be compliant with OSI and GOSIP protocols.

### 1.4 MAINTENANCE AND SUPPORT

- 1.4.1 ALAP shall have the option of being operational 24 hours per day, depending on the individual library's needs.
- 1.4.2 Housekeeping functions and the construction of indexes should be background jobs and not require the online system to be down while they are being performed, nor should they impair response time for system users.
- 1.4.3 Normal remedial maintenance shall be provided Monday through Friday, 8 AM to 5 PM local time

excluding Federal holidays, within four hours of notification of vendor. The system shall have remote access, diagnostic, and repair capability via modem.

- 1.4.4 The system hardware and software shall support the capability to perform maintenance and/or diagnostics by dial-up port arrangement. This provision does NOT apply to systems handling classified data where preliminary diagnostics will be performed on-site by Army library staff.
- 1.4.5 The system shall provide a set of diagnostics routines which will test all hardware units (including CPU, main memory, magnetic tape drive, disk devices, and other peripherals) and which isolates faults down to the replaceable plug-in level.
- 1.4.6 ALAP shall be capable of being operated by library personnel and shall require no specialized in-house maintenance or operating personnel.
- 1.4.7 ALAP shall provide file scan and repair tools which shall ensure that the integrity of the database is maintained even if data corruption is introduced through abnormal environmental conditions, hardware failure, or entry of invalid data. Scans shall be designed to run either in background or stand alone modes; repair shall be either automatic or under operator control. Data recovery shall be a function of repair when possible.
- 1.4.8 ALAP shall provide database administration tools which allocate system resources, specifically, monitoring database size and growth, providing statistical information, and maintaining the integrity of file structure and content. The tools shall function in a real-time mode, providing immediate information about the state of the database. The tools shall provide for automatic warnings of problems or potential problems.
- 1.4.9 ALAP shall provide additional protection from adverse events through sophisticated routines and easy-to-use tools which provide fault recovery and make fault conditions transparent to the end user.
- 1.5 SOFTWARE
  - 1.5.1 The application software shall be written in an ANSI standard higher-level language which is

capable of transfer to hardware other than the computer line being proposed .

- 1.5.2 If the language is not an ANSI standard language, the supplier shall detail the estimated number of programmers nationwide competent in the language and the number of CPUs on which it is being used.
- 1.5.3 Source code and system documentation for all applications programs must be supplied to the library or be placed in escrow by the vendor.
- 1.5.4 The library will sign a nondisclosure agreement.
- 1.5.5 The application software shall be written so as to permit maintenance by other than the original vendor.

## 2 USER INTERFACE

### 2.1 ACCESS METHODS FOR END-USERS

- 2.1.1 The ALAP shall provide a set of access methods for end-users. Many of these functions will overlap with the OPAC section.
- 2.1.2 ALAP shall provide library patrons access to specified functions. These functions include:
  - a. OPAC (defined as bibliographic records, usually MARC or COSATI)
  - b. Sending requests to staff members for reserves, acquisitions, and holds
  - c. Use of external files (defined as files other than the OPAC, but resident on the ALAP)
  - d. Access to remote databases
  - e. Listing of materials charged out to a patron
- 2.1.3 End-users shall be offered service via a series of menus, commands, and function keys, which will simplify and limit their choices. Library staff, by contrast, will be able to skip or shortcut menu trees, depending on their level of access, and will also have access to many portions of the system denied to end-users. (See also System Administration)
- 2.1.4 End-users shall be able to access the system by five methods:
  - a. terminals within the library.
  - b. dial-up via telephone.
  - c. connectivity with the local Email network
  - d. terminals at one ALAP installation shall be able to connect to another ALAP installation with whom an agreement of reciprocity exists. The mechanism of connectivity shall be transparent to the user, and will be expressed as a menu pick.
  - e. LANs
- 2.1.5 End-users shall be able to search the OPAC and external databases easily, through convenient, coherent, logical menu screens and menu trees. End-users shall have the capabilities needed to retrieve any information in the OPAC and all external databases. Where appropriate as determined by the system administrator, end-users shall be provided gateway access and access to remote databases. Remote databases are defined as databases not resident on the ALAP. (See also

## Section 2.2 Gateway/Remote Access Function)

- 2.1.6 ALAP shall provide a Common Command Language (CCL) for searching the OPAC, external databases, and remote databases. This function shall allow end-users to search several data sources without having to learn the searching syntax of each. Data sources will include government-owned data resident in ALAP, both OPAC and external files; may include government-owned databases in remote locations; and may include remote commercial databases. The CCL shall allow for a limited set of functions common across all database searching, such as Boolean logic, including nested logic, display, printing, and downloading of retrieved items, and switching databases. Since such data sources change frequently and may vary from site to site, each ALAP installation shall have the capability to create and modify files, procedures, screens, and scripts. This ability shall be built in to the system and will not require the ability to program in the language used by the ALAP.
- 2.1.7 ALAP shall provide for native mode searching of remote databases, where the CCL is inappropriate or where the searcher is skilled in the remote system.
- 2.1.8 An accounting module shall track the costs of searches in remote databases. The system administrator will define cost and retrieval limits for remote databases for which the library must pay.
- 2.1.9 End-users shall have the ability to use full Boolean logic, including, And, or, not, xor, and adjacency, against all text fields and specified fixed or numeric fields. This shall be available for both the OPAC and all external files accessible by library patrons.
- 2.1.10 Access shall have software and hardware permitting a seamless connection to at least the following remote databases:
- a. DTIC (government operated)
  - b. DIALOG (commercial vendor)
  - c. OCLC , incl. EPIC, FirstSearch, and PRISM (nonprofit corporation)
  - d. BRS (commercial vendor)
  - e. Datastar (commercial vendor)
  - f. MATRIS (government operated)
  - g. LEXIS/NEXIS (commercial vendor)

- h. RLIN (nonprofit corporation)
- i. WLN (nonprofit corporation)
- j. Marcive (commercial vendor)
- k. MEDLARS (government operated)

- 2.1.11 End-users shall have the ability to define virtual workspace within the system, download database records from the OPAC and all external files into a private file, and transfer such a private file to other end-users. End-users shall have the ability to download such files onto diskette, in ASCII.
- 2.1.12 ALAP will provide network access to area union lists by providing detailed holdings information for all libraries with in a MACOM or region.
- 2.1.13 End-users shall be refused access to sensitive portions of the ALAP based on a multilevel security protocol. For instance, certain terminals shall be designated for public use, and will not be able to access specified functions. Dial-in users shall have password controls which provide access depending on the status of the user. See also Section 13, System Management.

## 2.2 GATEWAY / REMOTE ACCESS FUNCTION

- 2.2.1 ALAP shall accommodate all aspects of remote access. Library service places emphasis on access over ownership. This system shall bring to reality the complete functionality of the "Electronic/Virtual Library". Gateway access shall include remote access to remote online databases, locally mounted ("external") databases, in-house and remote CD-ROM networks, DDN and Internet. A database which does not reside on the systems CPU is considered remote; an external database is defined as one other than the main bibliographic file of MARC and COSATI records, which is resident on the system CPU.
- 2.2.2.1 ALAP shall provide total remote access to all electronic resources owned by and accessible to each library.
- 2.2.2.2 ALAP shall be accessible via an installation's office and installation local area networks (LANs) as well as having dial access via modems.
- 2.2.2.3 ALAP shall conform to NISO Standard Z39.50.

- 2.2.2.4 ALAP shall provide electronic mail capabilities allowing the user community to electronically communicate with the library staff, and among the library staff.
- 2.2.2.5 ALAP shall be capable of providing a direct link to all libraries within a MACOM, Army, DOD, or a region.
- 2.2.3.1 ALAP shall have a front end user interface providing a common command language for searching all databases.
- 2.2.3.2 The common command language shall be used to search both the library's online catalog and all remote systems. The search engine shall have two modes: a beginner's menu mode and an advanced user's command driven-mode.
- 2.2.3.3 ALAP shall provide automatic connections with the selected remote system(s) as menu picks or by command choices.
- 2.2.3.4 ALAP shall provide remote access to both commercial and government databases.
- 2.2.3.5 ALAP shall allow use of all remote database systems in their native command language.
- 2.2.3.6 ALAP shall include a dial-out capability to allow access to other remote data systems to which the local system can not automatically connect.
- 2.2.3.7 ALAP will have an automatic detailed accounting feature to administer charge back functions. The users will always know how much an individual search has cost.
- 2.2.4.1 ALAP's gateway will be considered an intelligent gateway.
- 2.2.4.2 ALAP's gateway shall perform functions as a search tool and builder of local databases through record downloading and uploading.
- 2.2.4.3 ALAP will allow for the simultaneous searching of multiple systems (minimal 20 systems).
- 2.2.4.4 ALAP will automatically select the appropriate databases(s) based on the user input of subject terms.



- 2.2.4.5 ALAP shall be capable of flagging search responses as they come in indicating from which source they were retrieved. A status line will be shown for each database indicating the number of "hits" or items located.
- 2.2.4.6 ALAP shall allow for every search entered to be saved and re-executed automatically or by prompt.
- 2.2.4.7 The system administrator shall have the option to purge all searches at a preset time interval to avoid clutter.
- 2.2.5.1 ALAP's gateway will have a post-search processing function which will allow the end-user to check for duplicates, sort, and output to print or file in ASCII, E-mail, or word processing format.
- 2.2.5.2 ALAP will be capable of identifying and deleting duplicate citations retrieved from the various systems. The users will have the option of selecting which citation to retain.
- 2.2.5.3 Users shall be able to download, edit, and upload records from the OPAC, external databases, and remote databases into virtual workspace allocated to the user by the system.
- 2.2.5.4 ALAP shall be capable of allowing the user to create customized bibliographies from downloaded records.
- 2.2.5.5 System shall support translation of data retrieved from DTIC's Technical Reports database, OCLC, RLIN, etc.
- 2.2.5.6 The system shall include the addition of future new connections in a modular straightforward manner.
- 2.2.6.1 ALAP shall support interactive online support.
- 2.2.6.2 ALAP shall allow any user encountering difficulties in searching to receive on-line assistance from a librarian.
- 2.2.6.3 ALAP shall allow all interactions during the search displayed simultaneously on both the user's and a librarian's terminals.
- 2.2.6.4 The systems interactive function will be capable of conducting individual and group training sessions on line.

2.2.6.5 ALAP will be capable of utilizing "knowbots"

### 3 ONLINE PUBLIC ACCESS CATALOG (OPAC)

#### 3.1 GENERAL

- 3.1.1 ALAP shall support utilization of the online public access catalog (OPAC). The OPAC is defined as that part of the system in which the primary bibliographic files, generally MARC and COSATI records, are held. Other resource files held in the system and searchable by users are described in the "External Files" section. The following activities are associated with the OPAC:
- a. Manage searching of the OPAC
  - b. Manage displaying, printing, and downloading in the OPAC
  - c. Manage online assistance and instruction
  - d. Manage the ability to add other services such as access to additional external databases, access to gateways, communications with library staff, placing of holds on materials by patrons, etc.

#### 3.2 MANAGE SEARCHING OF THE OPAC

- 3.2.1 ALAP shall allow patrons to access the OPAC and retrieve information regarding the library's collection.
- 3.2.2 ALAP shall have the capability to define and search all MARC, COSATI, and user-defined fields and subfields according to indexing determined by the library during the profiling stage. It shall search keywords or phrases in all the fields at one time, or in any combination of two or more fields as specified by the searcher.
- 3.2.3 These options shall include, but not be limited to, the following. See also NISO Z39.23-1990. (MARC field tags shown as examples; similar indexing and retrieval shall apply to COSATI records):
- a. Author (1xx, 7xx)
  - b. Titles and uniform title (all x30, 2xx, 730, 740, 7xx subfield t, 245 subfield b)
  - c. Combination author/title key
  - d. Call number (050, 086, 090, 092, 099)
  - e. ISBN (020)
  - f. ISSN (022)
  - g. LCCN (010)
  - h. OCLC number
  - i. Series (4xx and 8xx)
  - j. Subject (all 600 fields)
  - k. Note fields (5xx)
  - l. Journal title

- m. Subject subdivision
- n. Keyword (single word/phrases from any specified part of the bibliographic records, indexed in one alphabetical file)
- o. Report number (037, 4xx subfield v, 088, 8xx subfield v)
- p. NTIS/DTIC accession number (037)
- q. Abstract
- r. Corporate author
- s. Performing organization
- t. Classification and limitation statements and dates
- u. Publisher number for music (028)
- v. Contract number
- w. Publisher
- x. Locations
- y. Holdings
- z. Reserve locations
- aa. Faculty name
- bb. Course name

- 3.2.4 ALAP shall complete searches based on left and/or right truncation. Wild-card Characters shall be supported, at beginning, end, or interior.
- 3.2.5 ALAP shall facilitate searches by providing a full Boolean capability using the logical operators (and, or, not) with up to nine levels of nesting. The system shall also support the use of adjacency operators (same, near, with) and relational operators (less than, greater than, equal to).
- 3.2.6 Search limiting language shall be an accepted part of searching. For instance, users may limit searches by publication date, language, call number range, location, or type of material.
- 3.2.7 ALAP shall ignore stopwords. Stopwords will be designated by the library.
- 3.2.8 ALAP shall facilitate editing a search strategy.
- 3.2.9 Users shall have the ability to abort a lengthy search.
- 3.2.10 ALAP shall be able to ignore punctuation at the library's request.
- 3.2.11 ALAP shall have the capability to browse through hits and retrieve, display, print, or download bibliographic records with holdings and availability information.

- 3.2.12 ALAP shall provide context-driven, library-definable and editable help screens, which are available at all times on demand.
- 3.2.13 Both menu-driven and command language search capabilities shall be available.
- 3.2.14 Where an ALAP services more than one site, such as branch libraries or multiple libraries on an installation or in a region, the system shall provide the capability to search one, a specified group, or all sites and to display and download information from all. It shall be capable of displaying a given library site's holdings, and/or all holdings attached to the bibliographical record retrieved.
- 3.2.15 ALAP shall support retrieval from the authority file thesaurus for search expression formulation, etc.
- 3.2.16 ALAP shall produce an explanatory message when a search fails to retrieve any records. It shall also display a list of closest matches and provide instructions and suggestions for what to do next.
- 3.2.17 When a record is retrieved, the authority controlled fields shall be linked to the system indexes to provide, upon demand, automatic retrieval of related records.
- 3.2.18 When a record is retrieved, the keywords in the text fields shall be linked to the system indexes to provide, upon demand, automatic retrieval of related records.
- 3.2.19 In a shared system, bibliographical and item searches shall pinpoint the owning library, as well as the current and home location of the item.
- 3.3 DISPLAY, PRINT, AND DOWNLOAD FROM THE OPAC
  - 3.3.1 ALAP shall provide the capability to print any screen display from a library-designated online terminal to a designated printer.
  - 3.3.2 ALAP shall provide online printing of bibliographies (that is, lists of citations or records) derived from all types of searches, to a printer attached to any terminal or to a system

printer.

- 3.3.3 ALAP shall provide downloading of bibliographies derived from all types of searches.
- 3.3.4 The library shall be able to limit the number of bibliographic citations for online printing from the OPAC.
- 3.3.5 ALAP shall allow the library to tailor the output format for displaying, printing, and downloading. Fields shall be displayable with either tags or word descriptions, and the library staff shall be capable of selecting this display mode at any time. The format options shall include, but not be limited to, the following:
  - a. Brief title display--a summary format showing title, call number, author, and publication year.
  - b. Full descriptive bibliographic information with holdings information.
  - c. Full MARC or COSATI record--full bibliographic information, including fixed and variable fields and field tags.
  - d. Full bibliographic record with field labels.
- 3.3.6 In any list, the user should be able to mark selected records for future use, display, printing, or downloading. For example, a user's search retrieves 50 hits, which he displays in brief title format. As he browses through the 50, the user may then mark records 8, 32, and 41, which are then displayed in full format upon command.
- 3.3.7 ALAP shall be capable of displaying "see" references which take searchers from non-authority access points to authority-controlled access points.
- 3.3.8 ALAP shall be capable of displaying "see also" references which direct searchers to other related authorized access points.
- 3.3.9 ALAP shall be capable of displaying and printing the full ALA character set, diacritics, and special characters in the OPAC.
- 3.3.10 When displaying retrieved records in shelflist order, ALAP shall display them using the ALA call number sort.
- 3.3.11 ALAP shall allow for every search entered to be

saved and re-executed automatically or by prompt.

- 3.3.12 Searchers shall be able to make sets, sort, and eliminate duplicates.
- 3.3.13 ALAP shall permit command stacking on all searches.
- 3.3.14 The system administrator shall have the option to purge all searches at a preset time interval to avoid clutter.

## 4 ACCESS TO EXTERNAL FILES

### 4.1 GENERAL

- 4.1.1 ALAP shall support utilization of external files. External files are defined bibliographic or textual or numeric files, resident in the system, other than the primary MARC and COSATI bibliographic files. Such files might be, for instance, journal citation files compiled by a vendor or a government source and loaded via tape. Such resource files are held in the system and are searchable by library users. ALAP shall handle the following activities associated with the external files:
- a. Manage searching of external files
  - b. Manage displaying, printing, and downloading
  - c. Manage online assistance and instruction
  - d. Integrate the searching of external files with searching the OPAC

### 4.2 SEARCHING EXTERNAL FILES

- 4.2.1 ALAP shall allow patrons to access external files and retrieve information regarding the library's collection. Such searching shall be via a menu pick on the system, and shall use the same logic and search techniques as the OPAC.
- 4.2.2 ALAP shall have the capability to define and search all text and user-defined fields and subfields according to indexing determined by the library during the profiling stage.
- 4.2.3 ALAP shall complete searches based on left and/or right truncation. Wild-card Characters shall be supported, at beginning, end, or interior.
- 4.2.4 ALAP shall facilitate searches by providing a full Boolean capability using the logical operators--and, or, not--with up to nine levels of nesting. The system shall also support the use of adjacency operators and relational operators (less than, greater than, equal to).
- 4.2.5 Search limiting language shall be an accepted part of searching. For instance, users may limit searches by publication date or type of material.
- 4.2.6 ALAP shall ignore stopwords when searching external files. Stopwords will be designated by the library.



- 4.2.7 ALAP shall facilitate editing a search strategy.
- 4.2.8 ALAP shall be able to ignore punctuation at the library's request.
- 4.2.9 ALAP shall have the capability to browse through hits and retrieve, display, or download records with any holdings and availability information.
- 4.2.10 ALAP shall provide context-driven, library-definable help screens, which are available at all times on demand.
- 4.2.11 Menu-driven, function key, and command language search capabilities shall be available.
- 4.2.12 Where an ALAP services more than one site, such as branch libraries or multiple libraries on an installation or in a region, the system shall provide the capability to search one, a specified group, or all sites, when the external file has specific holdings information included.
- 4.2.13 ALAP shall support retrieval from a thesaurus for search expression formulation, etc.
- 4.2.14 ALAP shall produce a verbal message when a search fails to retrieve any records.
- 4.3 DISPLAY, PRINT, DOWNLOAD FROM EXTERNAL FILES
  - 4.3.1 ALAP shall provide the capability to print any screen display from an online terminal.
  - 4.3.2 ALAP shall provide online printing of records derived from all types of searches, to a printer attached to any terminal or to a system printer.
  - 4.3.3 ALAP shall provide downloading of records derived from all types of searches.
  - 4.3.4 The library shall be able to limit the number of records for online printing from external files.
  - 4.3.5 ALAP shall allow the library to tailor the output format for displaying, printing, and downloading. Format options will vary depending on the content of the authority file and shall be fully library-defined.
  - 4.3.6 ALAP shall be capable of displaying "see" references which direct searchers from non-

authority access points to authority-controlled access points.

4.3.7 ALAP shall be capable of displaying "see also" references which direct searchers to other related authorized access points.

4.3.8 ALAP shall be capable of displaying and printing diacritics and special characters in external files.

5 FULL-TEXT CAPABILITY

5.1 FILE TYPES

5.1.1 The ALAP shall be capable of handling four general types of files:

- a. Bibliographic files in MARC format.
- b. Bibliographic files in COSATI format.
- c. External files of bibliographic citations, often created by non-Army and/or commercial vendors, which are loaded and indexed in the ALAP and are available as part of the OPAC.
- d. Full-text files.

5.1.2 ALAP will be capable of handling image files.

5.2 FULL-TEXT FILES

5.2.1 Full-text files are defined as the complete text of any magazine article, technical report, regulation, manual, book, newspaper article, pamphlet, or similar print item held in the library. Full-text files may be created within the library by keystroking or OCR scanning. Full-text files may also be created within the supporting Army organization (for instance the text of the technical reports written or sponsored by a lab). They may be created by DA (machine-readable file containing all Army regulations). They may be created within DoD or by any other government or commercial database provider. In all cases, every word (less specified stopwords) of the file (document) will be included in an inverted index. ALAP shall support adjacency searches and relational operators (less than, greater than, equal to) as well as straight Boolean searches.

5.2.2 Full-text files will normally be loaded as ASCII files. Graphics will normally be omitted. In some cases, full-text files may be keyed to digitized images of the material as it was originally published. In these cases, searches may be run against the indexed ASCII file, and the results will be described both by retrieval of the described text and by retrieval of a citation directing the user to a digitized image.

5.2.3 Local ALAP staffs will have the ability to OCR scan material and link the scanned material with bibliographic records. For instance, reviews, descriptive material, or tables of contents may be scanned and either included in or linked to a MARC

or COSATI record. In these cases, retrieval of the bibliographic record will lead the searcher to the linked material, and vice versa.

5.2.4 When full-text material over 4KB in length (such as entire documents or books) is included in the ALAP, it will be stored as a separate database, but with relational links to the bibliographic record describing it. Such material may be stored on different media, such as optical disk, but will be retrievable from the same terminals as any other OPAC material.

5.2.5 ALAP will be capable of providing full-text document delivery to the user's desk-top computer (both patron and staff). This will include both textual and image delivery.

## 6 CIRCULATION

### 6.1 GENERAL

- 6.1.1 All circulation functions shall be centrally maintained at the installation level library or branch library. The system shall support the library in tracking the location and status of items within and outside the library. The major sub-activities include:
- a. Control library patron information
  - b. Establish and maintain loan periods
  - c. Identify library item(s)
  - d. Support circulation activities.
  - e. Interact with the interlibrary loan function.
  - f. Support inventory control.
- 6.1.2 ALAP shall enable staff to charge and discharge library materials quickly, and to keep accurate and current records of these transactions.
- 6.1.3 ALAP shall be able to process the following types of charge-out and check-in transactions:
- a. Regular charge with item in hand or not in hand, or by telephone
  - b. Charge for in-library use only
  - c. Charge to bindery, interlibrary loan, or other pseudo patron
  - d. Recording of materials used in library prior to shelving
  - e. Regular charge with item not in hand
  - f. Library staff usage only
  - g. Check-in transaction for which there is a hold will automatically display the patron next in line for the hold. This will not be copy specific but will be next available copy.
- 6.1.4 ALAP shall provide the operator with the capability to produce customized circulation reports such as the following (online and/or in print, and from the circulation module to the local Email system):
- a. Item status report - A report of check-outs (historical and current), renewals, location transfers and hold information for an individual library item. Display shall include item title, author, call number, and current status, name, and identification number of patron who has checked out the item(s) in question.
  - b. Patron activity - A report identifying the items checked-out by the patron, should include title,

author, call number, copy/item information and barcode/record identifier.

c. Location holdings - A report detailing the total holdings of titles and items at a particular location, as well as the total check-outs.

d. Patron status - A report showing the history of the total check-outs, total renewals, current check-outs as well as a listing of items currently checked-out for an individual patron.

e. Patron List - A listing of patrons sorted by location.

f. Statistics on the number of times a title or a copy has circulated.

g. Printed lists of item which have not circulated in a specified time.

f. Circulation Notices - Notices sent to the patron for the following:

- (1) Overdues
- (2) Recalls
- (3) Unavailable holds
- (4) Available holds.
- (5) Billings.

g. Statistical Reports

- (1) Circulation activity by item type
- (2) Circulation activity by patron category
- (3) Added, edited, and deleted patron records
- (4) Circulation activity by classification number.
- (5) Circulation activity by reciprocal borrowing site.
- (6) Dump reports from circulation into E-mail module.
- (7) Circulation by reserve course
- (8) Lists of items assigned to reserve rooms, by faculty name or course name
- (9) Statistics on the number of call numbers by location.

h. Management information about utilization of collection to aid in staff scheduling, selection, weeding, storage, etc.

i. ALAP shall support retention of historical records of title use, but provide for deletion of individual patron use information to protect the privacy of patrons.

#### 6.1.5

In a shared database, libraries shall have the option to have their circulation activities independent of all other system members, or they can have a joint operation. Each member shall have the ability to set its own circulation policies with regard to loan periods, patron expiration date, overdue limits, etc., or have these policies

in common with other libraries. However, separate user and transaction history files shall be maintained for each member so that reports specific to a library can be generated.

## 6.2 CONTROL LIBRARY PATRON INFORMATION

The following sub-activities shall be supported by the system in order to support controlling library patron information:

- a. Convert library patron information
- b. Identify patron
- c. Maintain patron information.

### 6.2.1 Convert Library Patron Information

#### 6.2.1.1 ALAP shall support the loading of existing machine readable or hard copy library patron files at startup. It shall include the following data elements:

- a. Patron Name (full Name in standard format)
- b. Social security number (System Administrator shall determine whether or not to allow the SSN to print on specific report types)
- c. Office symbol/address
- d. Office telephone number
- e. Home address(es) (minimum of 4, with the option to select to which address notices/mail shall be sent)
- f. Home telephone number
- g. Barcode number
- h. Patron category
- i. Patron identification (if required for conversion to ALAP).
- j. Family members authorized/forbidden to use patron card, with multiple ID or link between sponsor and family members
- k. E-mail address
- l. Fax telephone number
- m. Charges
- n. Holds
- o. Bills
- p. Date priveleges granted
- q. Expiration date
- r. Predicted rotation or DEROS date

#### 6.2.1.2 ALAP shall support the conversion of patron records from its existing format (magnetic or hard copy) to the ALAP format, without loss of information (except as discussed in 6.2.1.3 and 6.2.1.4)

- 6.2.1.3 The initial load of patron information shall include a plan for identifying possible duplicates and correcting these errors prior to activation of the system.
- 6.2.1.4 As part of the conversion, it is desirable for the system to prepare a listing of possible errors, inconsistencies, and duplications prior to full conversion of the system.
- 6.2.1.5 Library will be able to utilize the installation's personnel database for the above information or to verify such information.
- 6.2.2 Identify Patron
  - 6.2.2.1 Each library patron shall be uniquely identifiable to the system using a unique patron identifier.
  - 6.2.2.2 ALAP shall provide at least four methods for retrieving patron information including, but not limited to, the following:
    - a. Unique identifier
    - b. Name
    - c. Barcode or OCR Number
    - d. Social Security number
  - 6.2.2.3 ALAP shall allow an authorized operator to enter the patron's full name, (in last name, first name, order) or a part of the last name in a right truncated form to retrieve a listing of potential matches from which an authorized operator may select the desired patron information.
  - 6.2.2.4 ALAP shall support patron identification by keyboard entry or optically scanning a barcode or OCR number.
  - 6.2.2.5 For purposes of verification, the system shall have the capability to display/print a list of family members authorized by a sponsor.
  - 6.2.2.6 An authorized operator shall be allowed to continue with all major circulation functions from the patron verification display (e.g., check-in, check-out, renew, hold, block, delinquent status and special check-out).
  - 6.2.2.7 All patron information displays shall include the patron status, category, classification, and privileges.



6.2.3 Maintain Patron Information

- 6.2.3.1 Access to patron records shall be restricted to authorized persons and designated terminals.
- 6.2.3.2 An authorized operator shall be able to register a patron at any library installation site.
- 6.2.3.3 Authorized operators shall be able to create, modify and/or delete patron information online at a terminal.
- 6.2.3.4 ALAP shall allow the establishment of not less than 100 different patron categories (e.g., local, inter-library loan etc.).
- 6.2.3.5 ALAP shall produce reports to include patron list limited by library site, including active reciprocal borrowers.
- 6.2.3.6 ALAP shall produce reports which provide patron activities/statistics for each of the individual library installation sites, including active reciprocal borrowers.
- 6.2.3.7 ALAP shall have the capability to attach and edit a free-text message, of at least 1000 characters in length, to the patron information. An authorized user shall be able to edit or delete this message at any time after it has been posted.
- 6.2.3.8 Authorized operators shall be allowed to edit and delete any or all messages from the patron record at any time.
- 6.2.3.9 ALAP shall allow blocking of a circulation transaction based upon a library-specified number of overdue items for a particular library patron.
- 6.2.3.10 ALAP shall allow an authorized operator to add, remove, and override blocks against a specific library patron.
- 6.2.3.11 Delinquent status shall, at the option of the library, include:
  - a. Patrons with an excessive number of items claimed returned
  - b. Patrons with an excessive number of lost, damaged or never returned items
  - c. Patrons with an excessive number of overdue

items checked-out.

d. Patron whose status has not been updated

- 6.2.3.12 ALAP shall notify the operator of a delinquent status (patron block) from any terminal when any transaction is attempted (e.g., an audible tone and/or by a verbal message).
- 6.2.3.13 ALAP shall display the reason for delinquency status.
- 6.2.3.14 ALAP shall have the ability to limit the number of items on loan to a patron by both facility, patron class, and type of item, with capability of override.
- 6.2.3.15 ALAP shall have the ability to display and print for a given patron only delinquent items, and no other borrowing history. This function shall be limited to specific terminals and authorized operators.
- 6.2.3.16 Patrons shall be able to charge materials on their first visit.
- 6.2.3.17 ALAP shall allow multiple users within a family, and make the sponsor responsible for family members. There shall be full cross-references between the sponsor and family members.

### 6.3 LOAN PERIODS

- 6.3.1 ALAP shall allow the establishment of not less than 100 different loan periods based upon either material type and/or patron category for each of the individual library sites.
- 6.3.2 ALAP shall be capable of determining loan periods from the materials and/or user category.
- 6.3.3 Authorized operators shall be able to set and easily change the loan periods without the intervention of a programmer.
- 6.3.4 In performing circulation activities an authorized operator shall be able to override the displayed loan period.
- 6.3.5 When calculating due dates for library items (with time of dat when applicable), the system shall

automatically adjust the date due forward in the case of holidays, and any other days that the library has defined to the system.

- 6.3.6 ALAP shall accommodate the special loan periods of reserve rooms.
- 6.3.7 ALAP shall have the capability to identify reserve room items by the following:
  - a. Course number/name
  - b. Faculty number/name
  - c. Special date due
- 6.3.8 The system-wide loan periods shall be capable of application by individual libraries or library units to specific patron types.
- 6.4 CIRCULATION ACTIVITIES
- 6.4.1 ALAP shall provide the capability to identify a library item by:
  - a. Keyboard entry of the item identification number
  - b. Scanning of the barcode for the item (for those sites using scanning)
  - c. Implementing the search parameters detailed in Section 4
- 6.4.2 Upon user-demand or as an automatic feature, the system shall display/print item status (to include last checkout date and due date) and/or item history (e.g, number of check outs, number of renewals) information.
- 6.4.3 From the item status display the system shall allow the user to view the full MARC record format.
- 6.4.4 Circulation activities shall be supported by the following sub-activities:
  - a. Perform conversion of circulating library items
  - b. Check out and renew library items
  - c. Check in library items
  - d. Support special circulation management activities.
  - e. Perform circulation backup.
- 6.4.5 The circulation files shall be updated online in real time, with a maximum delay of 10 seconds.
- 6.4.6 ALAP shall provide printed lists in shelf list order of items which have not circulated in a specified time.

- 6.4.7 ALAP shall accept partially cataloged or uncataloged items.
- 6.4.8 Ability to record in-building use by scanning labels on materials being reshelfed shall be provided, using a hand-held, battery-powered device.
- 6.4.9 ALAP shall display bibliographic and circulation status of materials in all collections, and provide a blind historic record of circulation by item.
- 6.4.10 Existing circulation records shall be switched over to the ALAP. The installation plan shall include a conversion plan detailing the alternatives and scenarios for converting the circulation file(s).
- 6.5 CHECK OUT LIBRARY ITEMS
  - 6.5.1 ALAP shall provide a means of allowing check-outs of library material from multiple library installation sites.
  - 6.5.2 ALAP shall be able to charge materials to patrons of other institutions entitled to reciprocal borrowing privileges.
  - 6.5.3 ALAP shall allow multiple check-outs to a single borrower without reentry of the borrower's identification information.
  - 6.5.4 ALAP shall display/print (either automatically or on-demand) the date the item is due.
  - 6.5.5 ALAP shall allow authorized operators to assign items to designated locations (i.e., reference, field offices, etc.) either by scanning or keyboard entry of the location's identification number.
  - 6.5.6 An authorized operator shall be able to key in information required to set the status and temporary location of an item.
  - 6.5.7 ALAP shall support special check out activities by allowing an authorized operator to attach a temporary or permanent item identification number label to a library item in the library system and immediately check-out the item to a valid patron. This process shall be completed either by scanning or keyboard entry of a minimal bibliographic and item description.

- 6.5.8 ALAP shall be able to support block loans to a facility or location, circuit lending to several facilities or locations, and individual loans to secondary locations.
- 6.5.9 ALAP shall have the ability to record the charge and discharge of titles obtained on interlibrary loan from other libraries.
- 6.5.10 ALAP shall be able to accept a transaction of "claimed returned" or "claimed never had" and report items so identified.
- 6.5.11 ALAP shall prevent charge-out of an item not previously checked-in.
- 6.5.12 ALAP shall provide a clear audible and verbal message (selectable by location) that the identification labels have been read and the information accepted shall be provided.
- 6.5.13 ALAP shall provide system-wide ability to lend material from one collection to another, and then to circulate the material to patrons from the second collection.
- 6.5.14 ALAP shall have the ability to accommodate loans from a pseudo-patron, with the stipulation that materials be returned to the pseudo-patron.
- 6.5.15 Loans may be block loans to a facility or collection, circuit loans to multiple facilities or collections, or individual loans. The titles and items included in such secondary collection loans shall be accessible through regular file inquiries on the database.
- 6.5.17 It shall be possible to list materials and users in a secondary collection loan in batch mode by a number of keys, to include but not limited to:
- a. Author
  - b. Title
  - c. Call number (including copy number)
  - d. Person requesting special status for the material and type code
- 6.5.18 ALAP shall not permit the charging of materials designated as noncirculating except as the restriction is overridden by an authorized operator.
- 6.6 CHECK IN LIBRARY ITEMS

- 6.6.1 ALAP shall automatically adjust the status of the item record indicating that it has been checked-in and is "available" (or an equivalent value).
- 6.6.2 The patron identification number shall not be required for the check-in functions.
- 6.6.3 When an item is checked-in, the system shall alert the operator (e.g., audible tone and a verbal message) when any of the following occurs:
  - a. There is a hold placed on the item.
  - b. There is no match found by the system.
  - c. The item is housed at another location, except those libraries with which there are reciprocal borrowing privileges.
  - d. Message is attached to the item (e.g., repair torn page; send to cataloging, etc.).
  - e. The item is an interlibrary loan item from another library.
- 6.6.4 It shall be possible to record the return of materials to the wrong library but maintain the link to the patron record until the material is returned to the home library or facility.
- 6.6.5 ALAP shall note returned items immediately at any location to which they are returned, regardless of the owning location, and shall signal if the material needs to be sent to another location for final discharge.
- 6.6.6 Status of the item during transit shall be appropriately indicated.
- 6.6.7 Final in-transit clearance shall not occur until the material is received at the owning facility.
- 6.6.8 Ability to record in-building use by scanning labels on materials being reshelfed shall be provided, using a hand-held, battery-powered, portable scanner.
- 6.6.9 It shall be possible to discharge a block loan as a block as well as item by item.
- 6.6.10 ALAP shall differentiate the home library from the other libraries with which there are reciprocal borrowing agreements.
- 6.6.11 ALAP shall maintain records on patrons of other institutions with reciprocal borrowing privileges.

- 6.6.12 ALAP shall print out a list of active reciprocal borrowers on demand (by institution or by patron type).
- 6.6.13 ALAP shall be able to generate statistics on reciprocal borrowing as determined by the system administrator.
- 6.7 SPECIAL CIRCULATION MANAGEMENT ACTIVITIES
  - 6.7.1 After identifying the library item, an authorized operator shall be allowed to perform the following library circulation management activities:
    - a. Renew library loans
    - b. Manage overdue loans
    - c. Process hold requests
    - d. Block library items.
    - e. Perform circulation backup.
    - f. Generate recall notices
    - g. Generate billing notices
  - 6.7.2 Staff shall be able to determine quickly what notices have been sent to patrons with materials charged out and what action is to be taken next.
  - 6.7.3 Renew Library Loans
    - 6.7.1 The renewal procedure is the extension of the loan period for those materials currently checked-out. The renewal function shall be performed in the same manner as the check-out function, with the new due date calculated within the established (check-out) parameters.
    - 6.7.2 ALAP shall enable an authorized operator to retrieve the item information for the particular item to be renewed by using the functionality detailed previously for identifying items and/or patrons.
    - 6.7.3 ALAP shall block a renewal when there is a block against the patron record.
    - 6.7.4 ALAP shall allow authorized operators to override the established parameters and manually enter a new date due during the renewal function.
    - 6.7.5 ALAP shall block the renewal of items with an outstanding hold-request.
    - 6.7.6 ALAP shall allow the authorized operator to

override the block for an item showing a hold-request.

6.7.7 ALAP shall limit the renewal function when there is a block against the patron record. An authorized operator shall be able to override such limits.

6.7.8 Upon renewal, the system shall automatically enter the new due date and immediately adjust all other appropriate system files.

## 6.8 OVERDUE LOANS

6.8.1 ALAP shall automatically determine that a checked out item is overdue based on the item's due date and automatically change the item status to "overdue".

6.8.2 ALAP shall print the following information on all overdue notices:

- a. Item identification number
- b. Item title
- c. Item author
- d. Call number or report number
- e. Patron identification number
- f. Patron Name and local address
- g. Due date of the material
- h. Textual contents of the message.
- i. Social Security number if selected by System Administrator

6.8.3 ALAP shall not produce overdue notices for items which have the following status:

- a. Lost
- b. Missing
- c. Claims returned
- d. Withdrawn
- e. Claims never checked-out.

6.8.4 Variations from library to library in grace periods for overdue, check-out restrictions, etc. shall be accommodated.

6.8.5 It shall be possible for an authorized operator to determine online a patron's overdue materials.

6.8.6 Each library in ALAP shall be able to determine the number of overdue notices to be sent.



- 6.8.7 Each library in ALAP shall be able to determine if notices are to remain in the system or are to be deleted after a time period specified by the library.
- 6.9 HOLDS
- 6.9.1 ALAP shall allow an authorized operator to place a hold request on a specific item or title to include items checked-out.
- 6.9.2 ALAP shall be able to identify the date after which the requestor does not desire the item. This date shall be an optional data element.
- 6.9.3 ALAP shall create a hold-request queue for an item according to the date of the request.
- 6.9.4 ALAP shall display the hold request queue upon user-demand. Authorized operators shall see the patron names. Patrons shall see only the queue number.
- 6.9.5 A hold request on an item shall cause it to be blocked at the point of check-out, check-in or renewal.
- 6.9.6 When a patron request is removed from the hold request queue, either because the date needed has passed or because the hold request has been cancelled, all system records shall be changed, reflecting the new queue ordering of requests.
- 6.9.7 When an item or title with a hold request is checked in, the system shall automatically update all appropriate system files.
- 6.9.8 Whenever the item or title is available, a notice shall be produced to inform the next patron that the requested item is now available.
- 6.9.9 ALAP shall allow the authorized operator to edit, modify, and/or delete information contained in the "Hold Queue".
- 6.9.10 Once the system generates a patron notice to inform the patron of the availability of the hold material, the item record shall reflect the status of "on-hold" or equivalent terminology.
- 6.9.11 The library shall be able to specify, without need or intervention of a programmer, the maximum period

of time (weeks, days,) that an item can retain the "on-hold" status.

- 6.9.12 ALAP shall have the ability to automatically print alerts for purchase when holds against a title reach a specified level, and to separate alerts by location.
- 6.9.13 ALAP shall support the placement of holds on titles or specific copies in other libraries using the system.
- 6.9.14 Block Library Item
  - 6.9.14.1 A circulation transaction shall be interrupted when an item presented for circulation meets any of the following conditions:
    - a. The item cannot be identified by the system
    - b. The item is circulating and has never been checked-in
    - c. The item has a hold or reserve status indicated
    - d. The item is owned by an agency other than the library
    - e. The item has a non-circulating, missing, lost or claimed-returned status.
  - 6.9.14.2 ALAP shall enable an authorized operator to add and remove blocks against item records at any time and override the automatic block function.
  - 6.9.14.3 When an item block occurs, the system shall display the reason.
  - 6.9.14.4 If an item presented for check-out has a status of missing, lost or claims-returned, the system shall automatically remove the block status and discharge the item by the act of checking it out and updating system information.
- 6.10 PERFORM CIRCULATION BACKUP
  - 6.10.1 The circulation function shall be able to accept the input of off-line circulation transactions, including both check-in and check-out transactions, from either a microcomputer or a portable hand held device.
  - 6.10.2 ALAP shall allow for the subsequent batch entry of this off-line circulation data.
  - 6.10.3 ALAP shall produce a written report detailing any

exception problem transactions encountered when reading and/or processing the batch, off-line circulation transaction files.

- 6.10.4 The backup circulation devices shall use optical scanning technologies and be compatible with the barcode or OCR labels used by the online system.
- 6.11 GENERATE RECALL NOTICES
  - 6.11.1 The circulation function shall be able to generate recall notices in those cases where:
    - a. The material is on indefinite or other lengthy loan period.
    - b. The material is overdue, but checked out by a patron in a category that does not receive overdue notices.
    - c. The material is placed on reserve or other special type of status.
  - 6.11.2 Recall notice shall include:
    - a. Patron name
    - b. Patron address
    - c. Title of recalled item
    - d. Author of recalled item (if applicable)
    - e. Date needed by
    - f. If the material may be re-reserved by patron at a later date
    - g. message field
- 6.12 Generate billing notices.
  - 6.12.1 The circulation function shall be able to generate billings, for lost/damaged materials, in accordance with standard Army procedures.
  - 6.12.2 Notices shall identify the following information:
    - a. Name of the patron
    - b. Address of the patron
    - c. Title of the item(s) damaged/destroyed
    - d. Reason for billing (i.e. type of damage or destruction)
    - e. Price of replacement item
    - f. Procedure for replacing the item (i.e. where/how to make payment or title of acceptable replacement)
    - g. When payment is due
    - h. Penalty for failure to make restitution
    - i. Social Security number if selected by System

Administrator

- 6.12.3 ALAP shall support transfer of circulation notices to a patron's electronic mail address.

- 7 INTERLIBRARY LOAN
  - 7.1 GENERAL
    - 7.1.1 ALAP shall support an interlibrary loan (ILL) capability to manage the library's borrowing and lending of materials with other libraries and information sources, to include the following interlibrary loan activities:
      - a. Request materials from other libraries
      - b. Loan materials to other libraries
      - c. Interact with the OCLC ILL subsystem, DOCLINE, or other external electronic interlibrary module
      - d. Interact with the system's circulation module
      - e. Identify borrowing/lending institutions
      - f. Provide management information reports regarding ILL activities
    - 7.1.2 Interlibrary function shall be maintained through an ILL module or through the circulation module.
    - 7.1.3 Once an item requested on ILL is received in the library, all circulation functions on that ILL shall be performed by the circulation module.
    - 7.1.4 ALAP shall support a range of statistics capabilities for both ILL borrowing and lending activities.
  - 7.2 ACCESSIBILITY REQUIREMENTS
    - 7.2.1 If the system is shared by multiple libraries, each institution shall have the ability to access holdings and availability information for all participating libraries regardless of whether bibliographic data is maintained in consolidated or separate files.
    - 7.2.2 System shall provide an electronic mail capability to link all participating terminals and institutions.
    - 7.2.3 In a shared system, the system shall utilize the electronic mail capability for ILL transactions among participating institutions.
    - 7.2.4 The system shall support access to a variety of external electronic mail systems including INTERNET, etc.

- 7.2.5 ALAP shall provide access from specified local terminals to the OCLC ILL subsystem or the DOCLINE ILL system.
- 7.2.6 Access to ILL functions and files shall be limited to specified terminals and authorized operators.
- 7.2.7 It shall be possible for an authorized operator to override ILL blocks and limitations.
- 7.3 CIRCULATION REQUIREMENTS
  - 7.3.1 ALAP shall have the ability to charge items to interlibrary loan.
  - 7.3.2 The ILL module shall interface with the circulation module to provide access to functions including, but not limited to:
    - a. Full charge and discharge functions, including renewals and recalls
    - b. Notice generation (in print or electronic format, as appropriate) to advise availability of the item, overdues, and recalls
    - c. Printing reports of all overdue materials
    - d. Monitoring patron delinquency
    - e. Fines, billing for lost materials, and chargeback
  - 7.3.3 A hold shall not be satisfied with material being checked-in which is on interlibrary loan from another library system.
  - 7.3.4 The ILL module shall utilize the system patron file for:
    - a. Requestor identification
    - b. Classification
    - c. Address
    - d. Billing and chargeback information
- 7.4 OCLC ILL SUBSYSTEM REQUIREMENTS
  - 7.4.1 ALAP shall provide access from specified local terminals to the OCLC ILL subsystem, DOCLINE, or other electronic systems.
  - 7.4.2 OCLC transaction number or DOCLINE transaction number shall be accommodated in the ILL request file. For other systems, a similar access point shall be maintained.

- 7.4.3 OCLC or DOCLINE transaction number shall be an access point for the ILL request file.
- 7.4.4 ALAP shall support the creation of ILL lending records through downloading of data from OCLC ILL subsystem or other system.
- 7.5 REQUESTING MATERIALS
- 7.5.1 The ILL function shall support both centralized and decentralized request routing protocols, serving main libraries, branches, and field activities as local organization requires.
- 7.5.2 The ILL request file shall accommodate the following information for each request record:
- a. Bibliographic data
  - b. Patron data
  - c. Requestor name if different from patron
  - d. Verification information
  - e. Billing data
    - 1. Will/will not pay, limit on charges
    - 2. Account to be billed
  - f. Copyright compliance indicator
  - g. Date not needed after
  - h. Transaction number
  - i. Charges
  - j. Date of request
  - k. Supplier
  - l. Date received
  - m. Potential lenders (up to five)
  - n. Referral dates/libraries to which request referred (up to five)
  - o. Request status (pending, in process, shipped, received, returned, conditional renewed, renewal requested, to be supplied on a future date, completed.)
  - p. Insurance information
  - q. Date returned
  - r. Date due, overdue indicator
  - s. Renewal request dates (two)
  - t. Renewal due dates (two)
  - u. Name of person who picked up material
  - v. Date material picked up
  - w. Request format (online, paper, microform, etc.)
  - x. Notes section
  - y. OCLC transaction number
  - z. DOCLINE transaction number
- 7.5.3 ALAP shall support the creation of ILL request records by:

- a. Keyboarding
  - b. Copying data from the system bibliographic files and, if appropriate, the journal citation module
  - c. Downloading of data from a bibliographic utility and other, library-specific, automated library systems.
- 7.5.4 Once an ILL request record is created, all further information shall update that record, and rekeying of information already in the record shall not be required.
- 7.5.5 The ILL request file shall be accessible by:
- a. Patron name, patron number
  - b. Transaction number
  - c. Journal title, book author/title
  - d. Date due
  - e. Overdue indicator
  - f. OCLC transaction number
  - g. DOCLINE transaction number
- 7.5.6 The subsystem shall support an ILL supplier file. The file shall accommodate the following data for each supplier:
- a. Supplier name
  - b. Supplier address
  - c. Supplier telephone number
  - d. Supplier fax number
  - e. Electronic mail code
  - f. OCLC code
  - g. Other codes
  - h. Lending charges
  - i. Lending policies
  - j. Turnaround time data
  - k. Fill rate data
- 7.5.7 The supplier file shall be accessible by:
- a. Institution name
  - b. Access codes (as in above)
- 7.5.8 ALAP shall be capable of generating printed address and UPS labels for suppliers online.
- 7.5.9 ALAP shall support a request format file containing the appropriate formats for:
- a. Local system electronic mail format, if applicable
  - b. OCLC ILL format
  - c. ALA recommended format
  - d. Other electronic and printed formats specified by the library



- 7.5.10 The format file shall be accessible by format name.
- 7.5.11 ALAP shall automatically format ILL requests in accordance with the format choice indicated by an authorized operator.
- 7.5.12 ALAP shall automatically transmit ILL requests electronically if OCLC, EMS, or another electronic format is chosen.
- 7.5.13 It shall be possible to generate requests one at a time or in batches.
- 7.5.14 ALAP shall provide a "cancel request" feature.
- 7.5.15 ALAP shall alert the operator if a request date falls within a library-specified number of days of the date designated as the "not needed" date for an item.
- 7.5.16 An appropriately qualified operator shall be able to access any ILL request record to determine the status of the request and, in a shared system, the position of the request in the lender string.
- 7.5.17 ALAP shall provide an alert or notice when a request has not been filled within a specified time.
- 7.5.18 When an authorized operator updates an ILL request record to signify receipt of a requested item, the system shall:
  - a. Update the request status.
  - b. Generate a notice of availability for the requesting patron on paper or electronically to a patron's Email address.
  - c. Update the patron file to reflect any changes to be billed.
  - d. Calculate and record supplier turnaround time and fill rate data.
- 7.5.19 When an authorized operator updates an ILL request record to signify that an item has been sent back to the lending library, the system shall:
  - a. Update the request status
  - b. Generate a printed or electronic notice to the lending library indicated that the item is in transit
  - c. Update the copyright compliance file
- 7.5.20 ALAP shall trigger a purchase alert for any title requested more than four times in a 12-month

period.

- 7.5.21 Patrons shall be able to enter ILL requests into an electronic mailbox accessible through the patron access catalog.
- 7.5.22 ALAP shall support at least forty default billing rates.
- 7.5.23 If an ILL request is unfilled, ALAP shall allow an authorized operator to create another ILL request using the same format, without rekeying.

## 7.6 LENDING MATERIALS

- 7.6.1 ALAP shall support a file of ILL lending records to accommodate requests for the loan of items from the library's collection to other institutions.
- 7.6.2 ALAP shall support the creation of ILL lending records through:
  - a. Keyboarding
  - b. Downloading of data from OCLC ILL subsystem
  - c. Other library-specified electronic sources
  - d. In the case of a shared installation, by automatic manipulation of an ILL request record created by another ILL unit
- 7.6.3 After initial entry of an ILL record, all further information shall update the record, with no rekeying of information required.
- 7.6.4 The ILL lending record shall include:
  - a. Transaction number
  - b. Requesting library/type/region-state-country
  - c. Date after which item is no longer required
  - d. Date request received
  - e. Date request completed
  - f. Item code
  - g. Format code
  - h. Billing code
  - i. Journal/book title
  - j. Date of journal/Year of publication
  - k. Referral code
  - l. Nonavailability code
  - m. Date action initiated
  - n. Date request shipped
- 7.6.5 The ILL lending record shall be accessible by:

- a. Transaction number
- b. Billing code
- c. Lending activity
- d. Requestor name
- e. Date request completed
- f. Journal/book title

- 7.6.6 ALAP shall provide access by the following subgroups of ILL lending records:
- a. Records received since specified date and time
  - b. Records for which action has not yet been initiated
  - c. Records which contain "not needed" date which fall within a library-specified number of days from a given date
- 7.6.7 ALAP shall maintain an ILL borrowing institution file. The file shall accommodate the following data for each borrowing institution:
- a. Institution name
  - b. Type of organization
  - c. General address
  - d. ILL delivery address (if different)
  - e. Phone number
  - f. Fax number
  - g. OCLC code
  - h. Billing code
  - i. Request count
  - j. Fill rate data
  - k. Turnaround time data
  - l. Notes
  - m. Electronic Mail address
- 7.6.8 The system shall be capable of generating printed address and UPS labels for borrowing institutions online.
- 7.6.9 ALAP shall be able to automatically generate a notification to the patron of nonavailability of the requested material according to library specifications.
- 7.6.10 The system shall generate interlibrary loan bills and reports on demand.
- 7.6.11 ALAP shall enable the local library to set billing rates by patron category, material format, and transaction type.
- 7.6.12 The system shall record each article photocopied for a given patron as a separate transaction.

- 7.6.13 The system shall support the input of referral/return transactions into the circulation mode.
- 7.6.14 The system shall support the automatic generation of referral notices according to library specifications.
- 7.6.15 ALAP shall support electronic transfer of ILL requests by patrons from a local area network to the circulation and/or interlibrary loan module.
- 7.6.16 ALAP shall provide reports as specified by the library by FY, CY, month, or date range for:
  - a. total numbers requested by a given library
  - b. total number requested from a library
  - c. Total number filled by each source
  - d. Total costs for each source
  - e. Total numbers and costs for each requestor

#### 7.7 COPYRIGHT COMPLIANCE REQUIREMENTS

- 7.7.1 ALAP shall include a copyright compliance file to accommodate records containing:
  - a. Journal title
  - b. Material type
  - c. Year of publication
  - d. Article title, volume number and pages
  - e. Requestor name
  - f. Requestor department/institution
  - g. Date material received/dispatched
  - h. Supplier
  - i. Transaction number
  - j. Reason (don't own, replacement, etc.)
  - k. Title usage statistics
- 7.7.2 The copyright compliance file shall be accessible by:
  - a. Journal title
  - b. Key word from title
  - c. Requestor name
  - d. Requestor department/institution
  - e. Transaction number
  - f. Material type
- 7.7.3 ALAP shall retain copyright compliance information for five years.
- 7.7.4 ALAP shall alert the operator if journal title, copyright code and circulation history indicate

that the copyright limit has been reached.

## 8 INVENTORY CONTROL AND COLLECTION MANAGEMENT

### 8.1 INVENTORY CONTROL

8.1.1 ALAP shall support the library in tracking the location and status of items within and outside the library. ALAP shall be able to collect data from inventory and usage, incorporate this, and provide manipulation capability to produce management information. This module shall support property accountability as well as integrate dynamically with the other modules to facilitate selection, weeding, relocation, etc. Search techniques shall be uniform with other ALAP modules.

8.1.2 ALAP shall provide a complete system of inventory control. Both circulating and non-circulating materials (e.g. pamphlets, student papers, vertical file materials) may be entered into the library database.

8.1.3 ALAP shall be capable of supporting an inventory of any portion of the collections by scanning items on the shelves using a portable terminal, and uploading that information into the system.

8.1.4 The inventory routine shall be capable of accepting and storing note information, by assigned code or free text, such as condition, replacement status, age, discrepancy, reorder instructions, missing, etc. The inventory routine shall check for items out of place on the library's shelves as well as for missing items.

8.1.5 The inventory date shall be added to the item record for each item inventoried.

### 8.2 REPORTS

8.2.1 An authorized operator shall have the capability to produce customized reports, such as the following inventory reports (online and in print):

- a. items not on shelf, checked out, or otherwise accounted for in the system
- b. Items on the shelf within a given shelf-list sequence
- c. Barcoded items for which there are no item records
- d. A report of check-outs (historical and current), renewals, location transfers and hold information for an individual library item, or a range of

items.

e. Location holdings - A report detailing the total holdings of titles and items at a particular location (either a location within a library or a branch or other library facility), as well as the total check-outs.

g. Statistical Reports

- (1) Circulation activity by item type
- (2) Circulation activity by patron category
- (3) List of added, edited, and deleted patron records
- (4) Circulation activity by classification number.

- 8.2.2 All circulation and inventory control reports may be sorted by and limited to ranges within:
- a. Patron Name (full Name in standard format)
  - b. Office symbol
  - c. Dewey, LC, NLM, or local classification number
  - d. Barcode number
  - e. Patron category
  - f. library location, special collection, site, or branch
  - g. date added to collection

## 9 CATALOGING

### 9.1 GENERAL

ALAP shall support the capability to create, load, add, modify and delete information required to support library cataloging activities. This section applies only to the main bibliographic files representing the book and document holdings of the library. These records are primarily MARC and COSATI. This section does not address external files. See also Section 3, OPAC; Section 4, Access to External Files; Section 5, Full-Text Capability; Section 2.14, Gateway / Remote Access Function; and Section 2, User Interface. The following functions shall be supported:

- a. Manage and control bibliographic information
- b. Manage and control copy/item information, incl. add and delete
- c. Maintain and control authority records.
- d. Formats include full MARC (including both LC/MARC and OCLC/MARC) and COSATI
- e. Support of non-Roman alphabets is also desirable.

### 9.2 MANAGE AND CONTROL BIBLIOGRAPHIC INFORMATION

ALAP shall have the ability to create, import, store, search, and export MARC records with complete integrity of structure (leader, record directory and variable fields); content designation (tags, indicators, and sub-fields); and the data content itself shall be maintained. PseudoMARC or translation into a database format which does not support MARC tags is unacceptable. Such MARC shall be based on ANSI Z39.2 and ANSI Z39.23. The cataloging and database management module shall interface with all other modules.

9.2.1 ALAP shall have the ability to create, import, store, search, and export COSATI records with complete integrity of structure (leader, record directory and variable fields); content designation (tags, indicators, and sub-fields); and the data content itself shall be maintained. Translation into a database format which does not support COSATI tags and the COSATI field structure is unacceptable.

9.2.2 ALAP shall accept and process direct electronic



transfer of bibliographic records through batch or single record loading from a bibliographic utility (e.g. OCLC, NTIS, DTIC), or from tapeloading or download from any electronic medium (e.g., CDROM).

- 9.2.3 ALAP shall accept loading of bibliographic records from archived tapes (1600 or 6250 bpi) produced by a bibliographic utility, e.g. OCLC or DTIC. Such loading shall be completed in background mode with no loss or degradation of data.
- 9.2.4 As bibliographic data records are entered into the system the library designated access points shall be automatically checked against the Authority Files. All text and other designated fields shall be automatically added to the inverted index files.
- 9.2.5 Manual and automated entry of bibliographic records shall utilize a bibliographic utility load capability (e.g., OCLC, DTIC) to capture library defined item/copy information.
- 9.2.6 ALAP shall support and maintain the MARC and COSATI bibliographic formats for monographs, periodicals, serials, audio-visual media, maps, sound recordings, microforms and computer files.
- 9.2.7 ALAP shall have the capacity to store and display diacritics and special characters.
- 9.2.8 ALAP shall allow input of bibliographic records via direct keyboard entry at a system terminal by an authorized operator.
- 9.2.9 ALAP shall provide library-defined templates for each format for entering bibliographic information.
- 9.2.10 Entry and modification of MARC and COSATI records shall be accomplished through full-screen edit.
- 9.2.11 Online deletion of bibliographic records shall be allowed by the system for all authorized operators. Deletion of the bibliographic record shall not be allowed if any copy/item records are attached to the bibliographic record.
- 9.2.12 When a bibliographic record is being modified or updated, the system shall lock that record to prevent more than one operator from editing it simultaneously.
- 9.2.13 When MARC record data is entered via batch input,

the system shall have the ability to check for duplicate records by matching the OCLC number (primary), and optionally the LCCN, ISBN, ISSN, Government Documents number, DTIC/NTIS accession number, or publisher number for music.

- 9.2.14 When COSATI record data is entered via batch input, the system shall have the ability to check for duplicate records by matching AD number, report number, or other operator-defined key.
- 9.2.15 ALAP shall allow merging of duplicate bibliographic records with transfer of all copy/item records to the remaining bibliographic record.
- 9.2.16 When a duplicate bibliographic record is encountered, the system shall link an item record to the existing bibliographic record.
- 9.2.17 Changes or updates to bibliographic records shall not destroy the link between the bibliographic and copy/item records.
- 9.2.18 ALAP shall have the capability of handling the migration of both the fully MARC records and the non-MARC records in the existent library bibliographic database. Such migration shall retain the complete integrity of all records. Mapping of fields from an existant database to the ALAP database, whether MARC or COSATI, shall be a part of the library's profiling process.
- 9.2.19 ALAP shall display all bibliographic records in true shelflist order when output is demanded in shelflist order. This shall take account of separate collections, Dewey, SuDocs, Local report or accession numbers, LC/NLM classification number practice, separate library sites, and Cuttering.
- 9.2.20 All filing and all displays in sorted order shall obey ALA filing rules.
- 9.2.21 ALAP shall have the capability of accepting and processing temporary records for rental collections both by manual entry and tape load.
- 9.2.22 The technical record must include, but not be limited to, the following information:
  - a. title
  - b. personal author(s)
  - c. corporate author

- d. descriptors
- e. descriptor note
- f. descriptor classification
- g. Originator dissemination control
- h. contract number
- i. project number
- j. task number
- k. subfield country of origin
- l. declassification
- m. declassification date
- n. downgrade date
- o. entry classification
- p. title classification
- q. report date
- r. classification authority
- s. accession number
- t. DTIC fields and groups
- u. performing organization
- v. report classification
- w. distribution/availability statements
- x. abstract
- y. abstract classification
- z. identifiers
- aa. descriptive note
- bb. pagination
- cc. report number
- dd. monitor agency
- ee. monitor agency number

9.2.23 ALAP shall provide for user-identified required fields for bibliographic information.

### 9.3 MANAGE AND CONTROL COPY/ITEM INFORMATION

9.3.1 Each physical piece in the library's holdings shall have a copy/item record.

9.3.2 Each copy/item record shall be linked to the appropriate bibliographic record.

9.3.3 The copy/item record shall include, but not be limited to, the following information:

- a. Call number
- b. Material type (must support < 1000 types)
- c. Price
- d. library site location
- e. Copy number
- f. Status of item (see circulation module)
- g. Barcode and/or system assigned unique record identifier
- h. Volume

- i. Part
- j. Issue number
- k. Year
- l. Other.
- m. contract number

- 9.3.4 ALAP shall accept a realistic quantity of copy/item records to be linked to a single bibliographic record, e.g. Federal Reporter copy/items may exceed 1000.
- 9.3.5 ALAP shall have the capability of handling the migration of existent library item/copy records retaining all information currently available for each copy (e.g. call number, material type, price, library site location, copy number, status of item, barcode or system assigned unique record identifier, volume, part, number, year, other).
- 9.3.6 ALAP shall be able to accept, store, display, and reconstruct for output complete copy/item records for all bibliographic records currently residing on an existent system.
- 9.3.7 ALAP shall display volumes and/or item parts added to the database in numeric order, not in the order in which they were added.
- 9.3.8 Copy/item records shall be automatically created from specified MARC fields and automatically linked to the appropriate bibliographic records as they are loaded.
- 9.3.9 ALAP shall provide both manual and automated capabilities for entering copy/item information. Manual entry shall be facilitated through the use of formatted screens. Automated entry shall be in background mode.
- 9.3.10 An authorized operator shall be able to add, modify and delete data from copy/item records via keyboard entry without having to retype the entire record and without destroying the link between the copy/item record and its bibliographic record.
- 9.3.11 When deleting copy/item records, the full MARC record shall be displayable at the time of deletion and if the copy/item is the last one attached to the bibliographic record, the system shall prompt the operator for verification of bibliographic record deletion. An authorized operator shall be

able to globally delete all items linked to a bibliographic record.

- 9.3.12 ALAP shall have the capability of adding library-defined copy/item information from a bibliographic utility. ALAP will allow a 1000 character message to be attached to a copy/item record. This message shall be editable.
- 9.3.13 ALAP shall have the ability to print spine and other labels and cards.
- 9.3.14 ALAP shall provide statistical reports detailing system wide and site specific, copy/item information. The statistical reports shall provide, but not be limited to, the following information:
  - a. Total number of added bibliographic records (By day, week, month and year)
  - b. Total number of added copy/item records (By day, week, month and year)
  - c. Total number of bibliographic or copy/item records which were deleted (By day, week, month and year).

#### 9.4 MAINTAIN AND CONTROL AUTHORITY RECORDS

- 9.4.1 ALAP shall have the capability to accept, display, store, and reconstruct for output complete authority control records in the MARC Authorities and MeSH formats including names, uniform titles, subjects, and series, to include DTIC and NASA.
- 9.4.2 ALAP shall be capable of accepting library of Congress MARC Authority tapes for purposes of editing the library Authority Files. Links to bibliographic records in the OPAC shall be maintained.
- 9.4.3 ALAP shall allow an authorized operator to input and edit authority records via keyboard entry at a system terminal.
- 9.4.4 ALAP shall provide for online merge and/or deletion of an authority control record via keyboard entry by an authorized operator.
- 9.4.5 As bibliographic records are entered into the system the library designated access points shall be automatically checked against the authority files.

- 9.4.6 An authorized operator shall be able to make global changes to access points of the bibliographic records that are linked to the authority file.
- 9.4.7 An authorized operator shall have the capability to enter/modify/delete "see" and "see also" references for bibliographic records.
- 9.4.8 ALAP shall provide "see" references to direct users of the system from unauthorized to authorized access points.
- 9.4.9 ALAP shall provide "see also" references to direct users of the system to other related access points.
- 9.4.10 ALAP shall display cross references associated with an entry retrieved by an authority file search.
- 9.4.11 ALAP shall provide a file to facilitate review by an authorized operator of newly added bibliographic records and authority records.
- 9.4.12 ALAP shall allow an authorized operator direct access into the authority file. Searches of authority records shall be allowed for any one of the following:
  - a. Name
  - b. Uniform title
  - c. Subject
  - d. Series.
- 9.4.13 ALAP shall allow the searching of the authority file by use of the search technique of right truncation, and by browsing an alphabetical list of terms.
- 9.4.14 ALAP shall disallow simultaneous edit to authority records via record locking.
- 9.4.15 ALAP shall execute authority record maintenance functions without significantly degrading response time or impacting other library management functions.
- 9.4.16 ALAP shall have the capability of handling the migration of MARC or MeSH authority records currently on the existent system. The conversion shall include retaining current "see" and "see also" cross references.
- 9.5 DTIC UPLOAD

- 9.5.1 ALAP shall provide upload capability from the local system into the DTIC technical report (TR) database. DTIC uses COSATI format, and the records shall be uploaded consistent with the DTIC SBIN procedures. ALAP shall have the capability to upload into NASA RECON.
- 9.5.2 ALAP shall allow an authorized operator to create a retrieval set of records for input to the DTIC TR database.
- 9.5.3 ALAP shall automatically translate local data to DTIC TR database input format.
- 9.5.4 ALAP shall prompt for mandatory fields of DTIC TR database which are not included in local catalog.
- 9.5.5 ALAP shall provide full screen edit capability of citations to be input into the DTIC TR database.
- 9.5.6 ALAP shall provide automatic connect for upload of translated and edited citations, recording of DTIC TR database input system responses and automatic logoff from the DTIC system.
- 9.5.7 ALAP shall provide user access to the recorded feedback and responses from the DTIC input system uploading process.
- 9.5.8 ALAP shall allow individual libraries to flag their newly cataloged records in the DTIC database.
- 9.5.9 ALAP shall support automatic transfer of approved records into the DTIC database.
- 9.5.10 ALAP shall provide for downloading from DTIC and overlaying into the local system records from the DTIC Technical Reports database.
- 9.5.11 ALAP shall provide for reports identifying records cataloged since the last upload to DTIC.
- 9.5.12 ALAP shall provide the ability to view, modify, delete, and merge sets of citations selected for uploading to DTIC both before and after translation.
- 9.5.13 ALAP shall provide a list of authority indexes used by a library. It shall show the number of bibliographical records attached to an authority record. The report shall show the new and unauthorized authority forms.

- 9.6 Upload to DTIC Work Unit Information System (WUIS)
- 9.6.1 ALAP shall provide the ability to upload records from the local system into the DTIC WUIS database. The records shall be consistent with the WUIS format and procedures.
- 9.6.2 The WUIS record must include, but not be limited to, the following information:
- a. transaction type
  - b. subsystem identifier
  - c. agency accession number
  - d. status of effort
  - e. dates associated with each event and transaction
  - f. security classification
  - g. distribution statement and limitation
  - h. subject categories
  - i. descriptors
  - j. Taxonomy codes and all codes associated with WUIS
  - k. all information dealing with the performing organization
  - l. all information dealing with the responsible organization
  - m. description of work
  - n. progress information
  - o. products information
  - p. funding information
- 9.6.3 ALAP shall provide for the WUIS record the additional fields as identified by DTIC in their current project to update WUIS.
- 9.6.4 ALAP shall provide for the WUIS record the same classification, downgrading, and regrading parameters as identified in para 9.4.6.



## 10 SERIALS CONTROL

### 10.1 GENERAL

10.1.1 ALAP shall support the functional and administrative tasks associated with serials record management which include:

- a. Establish/maintain serials information
- b. Check in serials.
- c. Manage serial binding
- d. Routing
- e. Claims
- f. Predictive checking in
- g. Holdings maintenance
- h. Duplicate detection
- i. Creation and retention of recent history
- j. Tracking of exceptions
- k. Support for the USMARC format for holdings data
- l. Management reports
- m. Online help for all screens and features
- n. Security controls
- o. Binding
- p. Spine and pocket labels
- q. Creation and deletion of item records
- s. Reading of commercial barcodes

10.1.2 ALAP shall be capable of supporting the decentralized management of serials for each of the Army's MAJOR Commands with the capability for network batch interface to a central system.

10.1.3 All serials management functions shall comply with NISO Z39.9.

10.1.4 The serials management function shall have the capability to interface with the acquisitions system for accounting information, vendor information, and with a bibliographic utility (e.g. OCLC) for MARC serials records. The serials management function shall have the capability to interface with the OPAC.

### 10.2 ESTABLISH/MAINTAIN SERIALS INFORMATION

10.2.1 ALAP shall support serials management functions by maintaining serials subscription information. The information shall include, but not be limited to, the following:

- a. Vendor / Suppliers
- b. Price

- c. Location(s)
- d. Requestor
- e. Title, volume, edition #
- f. Purchase order number
- g. Invoice number and any supplemental invoices
- h. Requisition number
- i. Date ordered
- j. Date received
- k. ISSN (International Standard Serial Number)
- l. Subscription(s) start date
- m. Subscription(s) stop date
- n. Number of copies
- o. Invoice/payment history
- p. Routing information.
- q. Publisher
- r. Claims
- s. Accounts
- t. Comments

- 10.2.2 The information listed above shall be available for display, searching, sorting, and reporting and editing.
- 10.2.3 ALAP shall support automated and manual entry of serial bibliographic information. ALAP shall have the capability of directly importing bibliographic information from MARC-format tapes and/or through an interface with a bibliographic utility.
- 10.2.4 ALAP shall prompt operators to enter the frequency, regularity, and enumeration information for serial record management as part of the entry process.
- 10.2.5 ALAP shall use the above information to establish an automatic prediction algorithm to expedite the check in process.
- 10.2.6 ALAP shall allow for flexible prediction algorithms to accommodate regular but non-standard frequencies.
- 10.2.7 ALAP shall provide an edit capability for both the manual and automated entry to check the quality and consistency of the data entered into the serials file.
- 10.2.8 ALAP shall provide the capability to manage duplicate subscriptions, irregulars, supplements, and indexes for serials, to include special issues, unnumbered supplements and other extra pieces.
- 10.2.9 ALAP shall maintain routing information necessary

to support each individual copy of a particular serial/subscription.

- 10.2.10 ALAP shall ensure that the bibliographic information for multiple copy serials is entered only once.
- 10.2.11 ALAP shall have the capability to automatically calculate the predicted check-in dates based on the frequency and regularity information entered by an authorized operator.
- 10.2.12 ALAP shall generate the check-in date using the default values to create the serials prediction information.
- 10.2.13 Authorized operators shall have the capability to delete serial information.
- 10.2.14 ALAP shall provide operators with the capability to produce management reports identifying the numbers of serial bibliographic records added, edited, and deleted for a particular range of dates.
- 10.2.15 ALAP shall provide operators with the capability to produce serials holdings in printed form or on tape. Listings shall be capable of being sorted in one of several orders; e.g. title, subject, ISSN, supplier, holding site, etc.
- 10.2.16 ALAP shall provide operators with the capability to produce management reports identifying the titles received by each routing recipient.
- 10.2.17 ALAP shall provide flexibility in handling frequency changes, either adding issues or reducing the number published each year.
- 10.2.18 ALAP shall provide a direct link to the Master Bibliographic File, pulling over all appropriate bibliographic information to eliminate the need to reenter any bibliographic information.
- 10.2.19 ALAP shall prove automatic prediction defaults for frequency and enumeration patterns which dominate individual library collections.
- 10.2.20 ALAP shall allow the prediction algorithm to be based on issue number first and not calendar date.
- 10.2.21 ALAP shall allow the flexibility to override system defaults to establish individual prediction

patterns.

- 10.2.22 ALAP shall allow for easy check-in of bound volumes with their unique enumeration pattern without conflicting with the prediction algorithm of current issues.
- 10.2.23 ALAP shall allow for the use of the MARC format for holdings, Z39.44.
- 10.2.24 ALAP shall accommodate at least seven hierarchical levels of issue enumeration
- 10.2.25 ALAP shall display holdings and location data in natural language, rather than in coded format.
- 10.2.26 ALAP will provide automatic links between indexing and location tools. The System will provide access to journal contents through the online catalog.
- 10.2.27 ALAP shall accomodate an indefinite number of subscriptions, titles, suppliers, and copies for individual titles.
- 10.2.28 ALAP shall be capable of defining and displaying the enumeration and chronology data of the most current issue of a title recorded in the system. This capability shall not be copy specific, but at the title level.
- 10.2.29 ALAP shall be capable of automatically summarizing individual holdings into a consolidated statement of holdings. This capability to be available for titles and for specific copies.
- 10.3 CHECK IN SERIALS
  - 10.3.1 ALAP shall facilitate the rapid entry of data required to check in serials as they arrive in the library, supporting single keystroke entry of received-issue data and barcode scanner input.
  - 10.3.2 ALAP shall automatically generate routing slips and call number labels as part of the check-in process. The system shall be capable of producing such lists and labels individually or in operator-defined batches.
  - 10.3.3 The routing slips shall be generated in the order in which the items were checked-in and printed at the workstation at which they were checked in.

- 10.3.4 As part of the check-in process, the routing status shall be displayed for the operator.
- 10.3.5 ALAP shall allow operators to check in multiple copies of a particular subscription as a group without the need to check-in each copy. The system shall support the check-in of multiple copies of an issue on a single check-in screen even when these copies are accomodated in separate copy records.
- 10.3.6 ALAP shall prompt an authorized operator when multiple copies of a particular serial should be available for check-in processing. Multiple copies may be assigned to individual locations.
- 10.3.7 An authorized operator shall be allowed to modify the prediction information for a record as part of the check-in process.
- 10.3.8 ALAP shall provide operators with the capability to produce management reports identifying the numbers of serials checked-in for a particular range of dates.
- 10.3.9 ALAP shall allow multiple copies to be assigned to multiple locations.
- 10.3.10 ALAP shall permit check-in at copy specific level.
- 10.3.11 ALAP shall record missed issues when operator overrides predicted issue (i.e., system identifies gaps).
- 10.3.12 ALAP shall permit the deletion of missed issues at any time.
- 10.3.13 ALAP shall allow an authorized operator to display and edit the full bibliographic record at any time. The system shall provide a link to the full bibliographic record to permit an authorized operator to resolve problems/conflicts at the check-in record level.
- 10.3.14 ALAP shall support recording of brief bibliographic data when an item is not formally cataloged.
- 10.3.15 ALAP shall display most current items first.
- 10.3.16 The system shall require only minimal keying of data by an authorized operator for titles which do not have a predictable pattern of enumeration or chronology.

- 10.3.17 ALAP shall be capable of accomodating the input of item-specific control numbers in barcode or OCR form from labels affixed to items during check-in processing.
- 10.4 MANAGE SERIAL BINDING
- 10.4.1 The bindery control activity of the serials management function shall provide automated support for processing and binding volumes of serials.
- 10.4.2 ALAP shall reflect the volume designation created by the binding process.
- 10.4.3 ALAP shall allow an authorized operator to specify bindery controls, specifying which volumes, date range of volumes, or quantity of issues are to be sent to a bindery.
- 10.4.4 ALAP shall advise the operator when all issues in a volume have been received and shall support the operator in locating any volumes which have not been returned.
- 10.4.5 ALAP shall support the management of serial binding by providing bindery instructions.
- 10.4.6 The library shall be able to define a set of "default" bindery instructions for each serial.
- 10.4.7 The bindery instructions contain data specific to the volume to be bound and shall include, but not be limited to the following:
- a. Volume designation
  - b. Spine label data
  - c. Binding color
  - d. Classification
  - e. Treatment of indexes, table of contents, and covers.
- 10.4.8 ALAP shall maintain bindery shipment records.
- 10.4.9 ALAP shall allow an authorized operator to define, modify, and delete bindery shipment records.
- 10.4.10 The bindery shipment information shall include, but not be limited to, the following information:
- a. Shipment code/number
  - b. Bindery name and address
  - c. Number of items in the shipment
  - d. Priority indicator

- e. Shipment status information
- f. Significant shipment to and from dates
- g. Purchase order and invoice information.

- 10.4.11 ALAP shall display/sort/report the information received above in support of the serials management functions.
- 10.4.12 ALAP shall automatically provide for review of bindery candidates. This feature may be overridden when necessary by an authorized operator.
- 10.4.13 ALAP shall provide for batch mode review of bindery candidates online and in print. It shall be possible to select subsets of this file for review based on a variety of selection criteria.
- 10.4.14 ALAP shall support preparation of binding orders from automatically generated candidates, and on demand from manual input.
- 10.4.15 ALAP shall allow an authorized operator to automatically adjust the location records of issues being assembled for binding to identify all appropriate stages of the process. The appropriate information shall be identified as a location in holdings display. Once items have been shipped, the expected date of return should be indicated.
- 10.4.16 ALAP shall produce documentation, available both online as a searchable file and in print, in support of the bindery function. These shall include, but not be limited to, the following:
  - a. Bindery notices - Identifies the copies which have been checked-in and are ready for binding in a specified volume.
  - b. Pick-up slips - Identifies which volumes are to be bound. The slips serve as a guide to collecting the individual issues from the shelves.
  - c. Bindery slips - Provides "default" or edited volume-specific binding instructions.
  - d. Bindery packing slips - Specifies the bindery's name and address, shipment number, priority, date and number of volumes in the shipment.
  - e. Bindery claim list - Identifies the unreturned items.
  - f. List of missing issues - required to be finalized before items can be processed for binding.
  - g. Bindery pickup list - Both online and printed. Shows enumeration and location of each issue

required for binding. This list shall be available in both title and shelving location order.

- 10.4.17 ALAP shall be capable of estimating the cost of binding per item and per shipment based on cost parameters entered in a menu-driven procedure.

#### 10.5 ROUTING

- 10.5.1 ALAP shall maintain a routing list for each copy of each issue received and routed.
- 10.5.2 ALAP shall print routing slips at a staff workstation or shared printer.
- 10.5.3 Routing lists shall include individuals' names, positions, offices, phone numbers, and other necessary identification information.
- 10.5.4 ALAP shall allow for manual override of automatic routing.
- 10.5.5 ALAP shall support on-line maintenance of routing lists.
- 10.5.6 ALAP shall maintain records of custodial and physical location of bound and unbound issues.
- 10.5.7 ALAP shall be capable of automatically prioritizing the order of recipients on routing lists according to the priority of the individual patrons and their location, as established by an authorized operator.
- 10.5.8 ALAP shall globally implement on all routing lists all required changes entered into the system; i.e., in an individual's name, position, rank, location, priority, etc.

#### 10.6 REPORTS

- 10.6.1 ALAP shall produce the following activity reports:
  - a. Issues checked in
  - b. Items routed
  - c. Items claimed
  - d. Binding orders produced
  - e. Bound volumes returned from bindery
  - f. Routing list for informational & maintenance purposes
- 10.6.2 A variety of statistical reports shall be available, including but not limited to:



- a. Number of titles
- b. Number of copies
- c. Number of issues checked in by period, operator ID, terminal, office, library site, etc.
- d. Number of claims issued by type, by supplier, by title, etc.

This capability need not be copy specific.

- 10.6.3 ALAP shall provide information of vendor performance, including but not limited to:
  - a. Actual price compared with "official" subscription price
  - b. Number and proportion of orders for which claims are issued prior to receipt of first issue
  - c. Number and proportion of claims from each vendor
  - d. Responsiveness to claims; i.e., number of claims settled after first, second, and third claim letters and number of claims unresolved after a library-specified period of time following issuance of a third claim notice.
- 10.6.4 ALAP shall provide information on the claim rate and pricing of individual binderies.
  - 10.6.4.1 ALAP shall provide number, type, and proportion of claims and deficiencies for each bindery shipment.
- 10.6.5 ALAP shall provide ready access, online and printed, to lists of all titles routed to a given individual and to all individuals receiving a given title or a specific copy of a title. This capability shall be available for single and multiple individuals, and for titles selected by a variety of criteria.
- 10.7 CLAIMING
  - 10.7.1 ALAP shall colocate all items flagged as having missing issues for which first claims have not been generated. This file shall be available online and in print.
  - 10.7.2 An authorized operator shall be able to flag an item to be retained as missing, or if the system is to generate a claim notice or include that item on a claim report.
  - 10.7.3 ALAP shall also be capable of generating claims without manually reviewing each title.

- 10.7.4 ALAP shall be capable of generating claims for single or multiple items.
- 10.7.5 ALAP shall generate claims conforming to the appropriate industry standard, currently NISO Z39.45-1983, Claims for Missing Issues of Serials.
- 10.7.6 An authorized operator shall be able to make changes in format and content of claim notices and reports without programmer intervention.
- 10.7.7 ALAP shall support a variety of selection criteria for the generation of multiple claims.
- 10.7.8 ALAP shall identify issues requiring second and third claims and shall automatically verify that the missing issue has not been checked in by the library.
- 10.7.9 ALAP shall allow for the identification of claims which have not received a response from the supplier.
- 10.7.10 Record formats shall provide areas for recording specific details or responses to claims.
- 10.7.11 ALAP will be capable of accepting vendor reports on claims in machine readable form.
- 10.7.12 Each claim report shall include the full title of the periodical, vendor order numbers, volume and issue numbers, dates, number of copies, and item number.

## 11 ACQUISITIONS

### 11.1 GENERAL

The ALAP acquisitions module shall be fully integrated with other modules. It shall accommodate incorporation, maintenance and output of MARC and MARC compatible bibliographic information as well as other relevant information. It shall provide or access database functions including but not limited to maintaining, sorting, displaying, and reporting information relating to bibliographic, order, customer (patron), fund and accounting, and vendor information. It shall support system supplied default information with manual override when necessary. It shall supply automatic updating whenever possible, facilitating manual input where necessary. It shall facilitate access throughout the process providing online, machine readable, or printed reports. It shall provide ordering capability for various formats, suppliers, and organizations or parts of the library's parent organization. Status shall be accessible through the OPAC and acquisitions module at all times. It shall support continued status throughout the in-process state and provide for record archiving at acquisition completion.

#### 11.1.1 The following acquisitions functions shall be accommodated:

- a. Pre-order searching
- b. Ordering
- c. Claiming
- d. Cancelling
- e. Receiving
- f. Fund accounting
- g. Currency control
- h. Statistics and report compilation
- i. Consideration file

#### 11.1.2 Data available to or stored in the acquisitions files and displaying in the acquisitions record shall include but not be limited to:

- a. Bibliographic information
- b. Acquisitions type (order, gift, approval, etc.)
- c. Status information (reported, received, cancelled, etc.)
- d. library/branch/copy/fund information
- e. Invoice information

- f. Vendor information
- g. Vendor report information
- h. Accounting information
- i. Requestor information
- j. Location (i.e., destination)
- k. Instructions to vendor (free text)
- l. Internal processing instructions (free text; nonprinting on order form)
- m. contract number
- n. vendor's catalog number
- o. local order number
- p. vendor's order number
- q. security classification

11.1.3 ALAP shall perform acquisitions in a centralized or decentralized mode for included libraries. It shall allow users to manage acquisition activities in a single library or consolidated site.

11.1.4 ALAP shall be capable of accommodating multi-institutional and multifund shared acquisitions.

11.1.5 ALAP shall support and provide customized reports for the system or individual sites. Profiling shall provide automatic report generation.

11.1.6 ALAP shall be capable of producing outputs in individual, batch, or automatic mode, including, but not limited to:

- a. New or revised purchase orders
- b. Claim letters/notices/lists
- c. Cancellation notices
- d. Return notices
- e. List of cancellations
- f. Selection lists
- g. Multipart work documents
- h. List of items in a processing area for more than the library-specified period
- i. New title reports
- j. Purchase alert notices
- k. Hold-availability notices
- l. Lists of invoices not cleared
- m. Vendor lists
- n. Vendor performance reports by category of material
- o. Open-order reports
- p. Fund-status reports by material type, format, requestor, and accounting classification system
- q. Checks or other payment vouchers
- r. Electronic/microform back-up audit trails by

title and by fund for accounting information for which online access is no longer required.  
s. voucher listing

- 11.1.7 Concurrently with purchase order/request production, ALAP shall perform the following functions, including but not limited to:
  - a. Adding purchase-order number to vendor file
  - b. Updating commitments/obligations in the fund file
  - c. Sorting the purchase orders by vendor number
- 11.1.8 ALAP shall support tracking of order, item and claim status by maintaining and automatically changing status and providing reports.
- 11.1.9 Current status of any or all titles ordered shall be constantly available to authorized users and OPAC viewers.
- 11.1.10 Keyword searching shall be available using OPAC search strategies.
- 11.1.11 Acquisitions information shall be updated online as soon as new or revised information is entered.
- 11.1.12 ALAP shall support Boolean searching using AND, OR, on acquisition records using any fixed fields.
- 11.1.13 ALAP shall have the capability of transferring appropriate information from file to file.
- 11.1.14 No rekeying of information already in the system shall be required.
- 11.1.15 ALAP shall employ an interactive record structure so transactions in record will cause dynamic changes in all affected online information/files.
- 11.1.16 The status information element shall include:
  - a. Status
  - b. Date status was set
  - c. Free text message area for further status details
- 11.1.17 Valid statuses shall include:
  - a. Record ready for purchase document/order

production

- b. Entered partial
- c. Claimed
- d. Expired claim
- e. Cancelled
- f. Not received
- g. Excess item
- h. Received partial
- i. Received final
- j. Receiving report forwarded
- k. Report information received from vendor
- l. Return requested
- m. Returned partial
- n. Returned final
- o. Invoice received
- p. Received without invoice
- q. Invoice overdue
- r. Invoice paid
- s. Reorder

- 11.1.18 ALAP shall use status information to signal the initiation of a variety of activities, such as produce purchase/request order, delete order, produce open order report, etc.
- 11.1.19 ALAP shall provide interface capability between bibliographic utilities, government and commercial vendors, and standalone machine readable products using MARC, COSATI, or other standard library machine readable formats and the current system.
- 11.1.20 The acquisitions module shall be capable of accepting, storing, and outputting information in MARC, COSATI and compatible formats.
- 11.1.21 The acquisitions module shall be available from all staff terminals on the system to users with appropriate passwords.
- 11.1.22 Password security for the acquisitions module shall delineate a variety of access levels based on the functions performed.
- 11.1.23 Appropriately authorized users shall be able to retrieve and change existing acquisitions records online.
- 11.1.24 ALAP shall have the ability to monitor ordering transactions by terminal number and individual password number.
- 11.1.25 ALAP shall be developed to permit online

communications with, and ordering from, suppliers and other entities.

## 11.2 BIBLIOGRAPHIC INFORMATION

11.2.1 ALAP shall support bibliographic information maintenance. Fields, including but not limited to, the following shall be available for data entry, storage, retrieval, and manipulation, regardless of source:

- a. Title
- b. Author
- c. Publisher
- d. Publication date
- e. Place of publication
- f. Edition
- g. Volume
- h. Binding
- i. Price
- j. ISBN/ISSN
- k. SuDocs number
- l. Report number
- m. LCCN
- n. Dewey call number
- o. LC call number
- p. Other call number
- q. Bibliographic Record Vendor Number (MARC tag 001; OCLC, etc.)
- r. Author/title key
- s. Subject
- t. Series
- u. Subtitle
- v. Copyright date
- w. Collation
- x. publisher's address
- y. distributor address
- z. type of material
- aa. security classification
- bb. Publisher's number for music
- cc. voucher number

11.2.2 ALAP shall display the appropriate screen format and prompts for bibliographic information to be entered or transferred.

11.2.3 ALAP shall provide capability for batch or individual record loading using various hardware options online or offline.

11.2.3 The ALAP acquisitions module shall accommodate all

material types otherwise supported, including but not limited to:

- a. Monographs
- b. Monographs in series
- c. Technical reports
- d. Government documents
- e. Military publications
- f. Law reports and statutes
- g. Continuations
- h. Musical scores
- i. Maps

11.2.4 ALAP shall accommodate and identify items in a variety of formats, including but not limited to:

- a. Print
- b. Microform
- c. Video media
- d. Audio media
- e. Electronic data media
- f. Software
- g. Cartographic materials
- h. Realia
- i. Games
- j. Art

### 11.3 ORDER FUNCTIONS

11.3.1 ALAP shall support operators in completing orders for library items. The activities required for tracking all acquisitions related to a particular item order include, but are not limited to, the following:

- a. Requests for information (price quotes/estimates, publication status, etc.)
- b. Ordering library items
- c. Modifying library item orders
- d. Cancelling acquisition orders
- e. Maintaining a desiderata list.

11.3.2 ALAP shall facilitate the processes required to print, mail, electronically/telephonically order or cancel an order at a single site or at a regional location.

11.3.3 ALAP shall provide the capability to order electronically and communicate using BISAC/SISAC using output in magnetic tape or other electronic



format.

- 11.3.4 ALAP shall provide output capability of formats compatible with applicable ANSI acquisition standards.
- 11.3.5 ALAP shall be capable of printing purchase orders/requests on 8-1/2" x 11" and 3" x 5" multiple part forms. Report formats shall be locally-selectable.
- 11.3.6 ALAP shall allow a single authorized operator to order for multiple sites with the capability of viewing/maintaining multi-institutional cost accounts. ALAP shall have the capability to order multiple copies and maintain an individual status for each copy if needed.
- 11.3.7 It is highly desirable that ALAP group or assemble individual orders by supplier for batch printing and processing.
- 11.3.8 It shall be possible to order the output of the following subsets of purchase orders/requests:
  - a. All purchase orders/requests
  - b. All orders for a particular vendor
  - c. All orders for a particular payment type(s)
  - d. All orders for a particular fund(s)
  - e. All orders for a particular order type(s)
  - f. All orders for a particular order status(es)
  - g. All orders for a particular location(s)
- 11.3.9 Acquisition information available online or for reporting purposes shall include but not be limited to the following:
  - a. Vendor ID
  - b. Request date
  - c. Order date
  - d. Received date, partial
  - e. Received date, final
  - f. Status request dates
  - g. In process date
  - h. Issue date
  - i. Purchase/delivery order date
  - j. Total price
  - k. Price paid
  - l. Quantity ordered
  - m. Quantity received
  - n. Number of weeks until first claim
  - o. Number of claims before cancel

- p. Mandatory cancel date
- q. Invoice number
- r. Invoice date
- s. Prepayment authorized
- t. Account being charged
- u. Line number in PO
- v. Received number (voucher)
- w. Requestor code/number
- x. Contract number

- 11.3.10 ALAP shall permit the creation of records for selection purposes.
- 11.3.11 ALAP shall provide access to partial records.
- 11.3.12 ALAP shall provide a selection list feature where titles the library intends to order may be recorded online.
- 11.3.13 ALAP shall default to current date or allow an authorized operator to override for one record or several.
- 11.3.14 ALAP shall be capable of holding orders for later review and release by an authorized person.
- 11.3.15 Once an acquisition record has been created, all further actions shall update not replace this record. Duplicate keying or rekeying shall not be necessary.
- 11.3.16 ALAP shall prohibit the assignment of duplicate order numbers, whether entered manually or assigned automatically, by providing an audible and verbal message. An authorized operator shall be able to override this feature.
- 11.3.17 ALAP shall block duplication of orders for one bibliographic item. An authorized operator shall be able to override this feature.
- 11.3.18 ALAP shall display the appropriate screen format and prompts according to whether or not a purchase order needs to be produced. Default information shall be system supplied once vendor code is entered.
- 11.3.19 ALAP shall accommodate the following order types:
  - a. Firm order
  - b. Prepayment
  - c. Selection list

- d. Gift
- e. Exchange
- f. Membership acquisitions
- g. On approval
- h. Blanket order
- i. Standing order
- j. New subscription
- k. Renewal subscription
- l. Continuation
- m. Deposit accounts
- n. Government document
- o. library specified types (may be several options)
- p. Credit card

- 11.3.20 Depending on the order type selected by the user, ALAP shall display the appropriate screen format and prompts for order data.
- 11.3.21 The desiderata file shall generate "consider for reactivation" reports based on dates incorporated in desiderata records.
- 11.3.22 Cumulative status information shall be compilable by record number to provide a history of the order.
- 11.3.23 ALAP shall provide interface capability from ALAP to 1) bibliographic utilities (OCLC, UTLAS, RLIN, WLN, etc.), 2) database processing vendors (Brodart, Blackwell North America, etc.), 3) CD-ROM bibliographic products (Bibliofile, LC, etc.), and 4) jobbers (Baker and Taylor, Midwest, etc.) using MARC or compatible database format and current system.
- 11.3.24 ALAP shall accommodate the receipt of unordered items without requiring operators to complete the full ordering process and associated data entry.
- 11.3.25 ALAP shall allow operators to designate receipt of items individually or in a batch. Receipt of items shall automatically change the item's status.
- 11.3.26 ALAP shall allow an authorized operator to cancel a single item or multiple items on an order.
- 11.3.27 Any change in acquisition data shall result in automatic amendment of copy(ies) of that record in the bibliographic data base.
- 11.3.28 ALAP shall be capable of handling receipt of items with invoices, items without invoices, and invoices without items.

- 11.3.29 ALAP shall be capable of accepting new bibliographic information about a title at any time after order placement or when its receipt is recorded.
- 11.3.30 It shall be possible to request full cataloging records from online or machine readable databases or vendors and use them to update acquisitions records.
- 11.3.31 ALAP shall be able to handle reorder from another vendor, including reorder direct.
- 11.3.32 ALAP shall be able to "claim" invoices at a specific period of time after receipt of an order.
- 11.3.33 ALAP shall provide for the retention of records under conditions such as: item out of print, publication cancelled, order cancelled, etc.
- 11.3.34 ALAP shall permit and maintain records of out of print and other cancelled orders, and shall provide for purging the same in individual batch or a automatic mode.
- 11.3.35 ALAP shall be able to differentiate different copies from different sources.
- 11.3.36 ALAP shall print appropriate forms required for returning an item to the supplier.
- 11.3.37 Receipt of items information shall be maintained and available for archival storage off-line.
- 11.3.38 When a purchase order is complete and the invoice has been received, the acquisitions record shall be flagged to permit its later deletion or transfer from the acquisitions file.
- 11.3.39 Upon entry of receipt information, the system shall update the vendor file, including vendor report statistics.
- 11.3.40 ALAP shall have the capability of tracking an item through processing.
- 11.3.41 If an item remains in a processing area beyond a library-specified period, the system shall produce overdue reports.
- 11.3.42 ALAP shall generate a multipart work document to follow the item through cataloging and processing.

- 11.3.43 ALAP shall permit the recording of holds against titles on order and in process.
- 11.3.44 ALAP shall provide requestor notification of item receipt pulling necessary information from ALAP name/data files.
- 11.3.45 ALAP shall generate and print automatic overdue publication status requests with human verification.
- 11.3.46 ALAP shall automatically change the claim status when the acquisition record is updated to received.
- 11.3.47 The ALAP claim cycle, automatic or system supplied based on vendor profile, shall be capable of being overridden by an authorized operator.
- 11.3.48 An authorized operator shall be capable of overriding the claim cycle for a particular purchase order.
- 11.3.49 Depending on the acquisition type chosen by the user, ALAP shall display the appropriate screen format and prompts to establish the claim cycle for the order.
- 11.3.50 ALAP shall produce claims management reports to assist in analyzing claims.
- 11.3.51 ALAP shall provide the capability to track/report claims based on the type of claim (e.g. potential, verified, first, second, third, cancelled, expired, resolved).
- 11.3.52 ALAP shall automatically, on demand, generate a status request for all verified claims.
- 11.4 LIBRARY MATERIAL SUPPLIER INFORMATION
  - 11.4.1 The module shall accommodate an online vendor file containing information on publishers, agents, and other suppliers to which notices, orders, and similar correspondence may be sent.
  - 11.4.2 The vendor information file shall be accessible from other modules using the same search strategy.
  - 11.4.3 The vendor file shall accommodate the following, to include but not limited to:

- a. Name
- b. Code
- c. Address (payment, ordering, shipping, etc.; minimum two separate)
- d. SAN
- e. Point of Contact
- f. Phone numbers (voice, data, fax, etc.; minimum five separate numbers)
- g. Account number
- h. Contract number (BOA, GSA, requirements, etc.)
- i. Contract expiration date
- j. Tax ID
- k. Business category (small, minority, sole, etc.)
- l. Accepted order formats
- m. Accepted order transmission formats
- n. Fill or kill date
- o. Default claim time
- p. Discount schedule
- q. Type(s) of items supplied
- r. Notes/comments
- s. Linking codes for default publishers/vendors

- 11.4.4 The vendor file shall accept input from machine readable sources (OCLC name-address directory, online, CD-ROM, tape, etc.).
- 11.4.5 The vendor file shall accommodate vendor performance data calculated by ALAP to indicate the average amount of time a particular vendor requires to fill an order and the percentage of fill by statistical category.
- 11.4.6 ALAP shall allow an authorized operator to enter, modify, delete, any item supplier information using formatted screens or prompts.
- 11.4.7 When entering or modifying item supplier information, ALAP shall allow an authorized operator to duplicate or copy any common data elements into subsequent fields required to complete the information.
- 11.4.8 ALAP shall provide online or offline reports in printed or electronic format produced automatically through system parameters or on demand in batches or individually.
- 11.4.9 Each record shall contain a claim cycle default value.
- 11.4.10 ALAP shall be capable of printing the vendor file to provide a hard-copy or machine readable listing

of all vendors used by the library.

- 11.4.11 ALAP shall be capable of supporting a default vendor option.
- 11.4.12 ALAP shall permit the establishment and maintenance of detailed donor and exchange partner records.
- 11.4.13 It shall be possible to identify material received from a particular donor/exchange partner within a variable, library-specified period.
- 11.4.14 It shall be possible to identify all material dispatched to an exchange partner, both currently and historically.

#### 11.5 CUSTOMER/USER/REQUESTER DATA

- 11.5.1 Data for this purpose shall be merged with the patron information files. ALAP shall automatically extract information needed for acquisition activities.
  - 11.5.2 Additional data fields shall be available including but not limited to:
    - a. Institutional/group entries
    - b. Cost code
    - c. Appropriation code
    - d. Financial type PIN or other authorizing code for costing.
    - e. Linking fields between personal users and group entries.
    - f. Priority indicator
    - g. Authorization levels (multiple copies, supply time, etc.)
    - h. Acquisition specific comments/notes
  - 11.5.3 Historical usage acquisition reports shall be available in electronic or print format, automatically as profiled or on demand, individually or batched.
- #### 11.6 FUNDS CONTROL
- 11.6.1 ALAP shall allow operators to establish funds, maintain funds, close funds, post miscellaneous changes to funds, and provide financial reports for all acquisition activities performed in the library.

- 11.6.2 ALAP shall accommodate an unlimited number of fund file records.
- 11.6.3 Fund information shall include, but not be limited to, the following:
- a. Organization/user unique number
  - b. Amount budgeted
  - c. Amount committed
  - d. Amount obligated
  - e. Amount expended
  - f. Amount deobligated
  - g. Uncommitted balance
  - h. Beginning balance (previous FY)
  - i. Prior year obligations
  - j. Cash balance
  - k. Supplementary budget appropriations
  - l. Special funding (restrictions, special source, etc.)
- 11.6.4 ALAP shall support funds control for a single library site or for multiple sites.
- 11.6.5 ALAP shall support the maintenance, reporting and tracking of orders for multiple locations (library sites) with multiple cost accounting requirements including, but not limited to, the following:
- a. Pre-payments
  - b. BPAs (Blanket Purchase Agreements)
  - c. Imprest funds
  - d. Deposit accounts (e.g. GPO, NTIS, DTIC, etc.)
  - e. Transfer of funds to the library of Congress
  - f. Credit card account number
  - g. Purchase order number
  - h. Nonappropriated funds
  - i. Purchase order/request number
- 11.6.6 ALAP shall allow the local site to describe a fund hierarchy to manage library funds for each site.
- 11.6.7 The fund file structure shall allow for up to six levels of fund file record nesting.
- 11.6.8 ALAP shall permit the sharing of costing for orders between funds, both within and among libraries.
- 11.6.9 ALAP shall permit fund obligations and expenditures where the fund has no allocation but draws from a higher or exterior allocation.
- 11.6.10 ALAP shall check all arithmetic operations, both



those performed by operators and those in input data such as invoices.

- 11.6.11 ALAP shall provide constantly updated fund information.
- 11.6.12 The fund file shall be updated automatically online as transactions are entered in any interactive file or by an authorized operator.
- 11.6.13 ALAP shall provide periodic, cumulative fund activity and commitment reports.
- 11.6.14 ALAP shall have the capability of calculating and applying an obligation factor to determine an obligation order price which differs from the item order price.
- 11.6.15 In addition to the general user query capability, ALAP shall generate, but not be limited to, the following reports:
  - a. Fund transaction log
  - b. Fund activity report
  - c. Summary report for the fiscal year
  - d. Fund name list.
- 11.6.15 ALAP shall provide an early warning alert of fund depletion when the level of obligation(s) reaches a library-specified value.
- 11.6.16 ALAP shall permit temporary freezing of funds with overriding capability:
  - a. Freezing new orders but permitting payment on outstanding orders
  - b. Freezing both new orders and further payment
- 11.6.17 ALAP shall have the capability of producing reports which accommodate periods during which items are still being received against the previous FY appropriation, giving the library the choice of reports which include or exclude these overlaps.
- 11.6.18 ALAP shall be capable of reporting the number of items and titles received against a particular fund over varying periods of time.
- 11.6.19 ALAP shall be capable of producing and forwarding receiving reports, in electronic or hard copy format, authorizing finance offices to pay.
- 11.6.20 ALAP shall be capable of calculating average annual

costs for categories of materials by type, format, and fund.

- 11.6.21 ALAP shall be capable of retaining fund accounting information online for a library-specified period not to exceed three years.
- 11.6.22 Once fund information is no longer required to be retained online, ALAP shall provide output for paper and electronic format archives.
- 11.6.23 ALAP shall handle the conversion of foreign currency prices.
- 11.6.24 Lists of invoices not cleared, or not cleared within a specified period after receipt, shall be available upon demand.
- 11.6.25 Invoices shall be accessible by vendor invoice number.
- 11.6.26 ALAP shall accommodate credits, refunds, and partial order payments.
- 11.6.27 ALAP shall be capable of maintaining notational fund files for exchange partners and donors.
- 11.6.28 The funding files for exchange partners shall permit separate accounting for value of items received and value of items dispatched.

- 12 INTERCONNECTION WITH STANDARD ARMY SYSTEMS
  - 12.1 SUPPORTING ORGANIZATION'S SYSTEMS
    - 12.1.1 ALAP shall be compliant with all applicable US Army Electronic mail standards, including MMDF2 and X.400. ALAP shall be required to provide connectivity to PROFS, Officepower, Micromail, or any other similar system running in the supporting organization. The proposed system shall allow users to:
      - a. connect to the local or installation Email system.
      - b. allow a library staff member to use an ALAP terminal to send and receive notes and to complete file transfers both to and from the local Email system.
      - c. select Email connectivity as a menu pick within the ALAP.
      - d. facilitate connection to DDN and NREN (formerly Internet).
      - e. allow automated transfer of management reports, as, for instance, overdue statements, from the ALAP into the local Email system. Thus, ALAP would run overdue reports, match them against a stored list of Email addresses, and automatically send the overdue reports to the appropriate patrons. Similarly, ALAP staff could automatically notify a user that material he requested had arrived in the library. Should the designated E-mail address be invalid or unreachable, ALAP shall print the report in a form suitable for mailing.
  - 12.2 OTHER ARMY SYSTEMS
    - 12.2.1 ALAP shall allow connection to other standard Army systems such as personnel, property book, clearing, procurement, finance and accounting, and other systems for the purpose of downloading relevant information and avoiding rekeying or manual entry of information at the point of activity.

- 13           SYSTEM MANAGEMENT
- 13.1       GENERAL
- 13.1.1     System management permits the systems administrator to maintain the operating environment of the system through the following functional activities:
  - a. Control security access
  - b. Provide online help capability
  - c. Archive data
  - d. Administrative requirements.
  - e. User training requirements.
- 13.2       CONTROL SECURITY ACCESS
- 13.2.1     This functional component shall provide the capability for authorized operators to access data in the system and complete functions which they are authorized to perform.
- 13.2.2     ALAP shall include multi-level access security (up to 6 authorization levels possible) for each of the functions within the system. A minimum of 4 levels are required: user, staff, supervisory staff, and system administrator.
- 13.2.3     Authorization codes and/or passwords shall be masked or not printed.
- 13.2.4     The system administrator shall be able to change, block, and/or delete security passwords or authorizations at any time and without the intervention of a programmer.
- 13.2.5     User access shall be controlled by:
  - a. Allowing only authorized personnel to access the system
  - b. Restricting operator access to those functions the operator is authorized to perform. User access shall be controlled via user security privileges and need-to-know authorizations. User access shall be allowed by checking against lists or by user profile.
  - c. Restricting the terminal to specific authorized functions (such as OPAC search-only access)--restrictions shall be by terminal location and/or terminal type
  - d. Providing an access audit trail for tracking unauthorized attempts to access the system
  - e. Providing lock-out capability to automatically disable the appropriate terminal after a pre-defined number of unsuccessful log-on attempts

f. Providing automatic log-off and/or screen clear capability after a pre-defined length of time following system use.

g. Checking user authorization against the distribution and security marking of online information to enable a blockout capability which will prevent users with the wrong authorization level from seeing specified records.

- 3.2.6 ALAP shall provide an accountability trail. The system shall record security classification, downgrading information, postal registration numbers, date document received, sender, restrictions, contract numbers, office symbols, and phone numbers for specified documents.

### 13.3 PROVIDE ONLINE HELP CAPABILITY

- 13.3.1 ALAP shall provide a context-driven, system administrator defined help capability for each system function at the operating system level and the functional level. These messages shall not interrupt the flow of work, e.g. using windowing or screen overlays. Each library shall be able to develop additional help screens as desired. An authorized operator shall have the ability to edit help functions, search instructions, screen-specific instructions, or messages showing correct search-term forms.

- 13.3.2 ALAP shall provide the operator (online) with any valid codes, etc., that are required to perform system functions.

- 13.3.3 ALAP shall provide comprehensive error messages to users when a mistake is made, e.g. what the mistake was and possible remedies.

### 13.4 ARCHIVE DATA

- 13.4.1 In accordance with approved Army library policies and procedures, and based on library-defined parameters maintained in the system, this functional component shall provide the capability to retrieve, archive, and purge data from the system.

- 13.4.2 For the purpose of ad hoc reporting and end of month/year statistics, the system shall provide a means to retrieve data previously archived by site and/or group and or system.

## 13.5 ADMINISTRATIVE REQUIREMENTS

- 13.5.1 ALAP shall have the following capabilities:
- a. To load and create MARC and COSATI tapes
  - b. To have exterior gateway to import and export information
  - c. To backup transactions on a continual basis
  - d. To maintain/modify system profile
  - e. To restore system data.
  - f. To produce patron file tapes for export.
  - g. To produce authority file tapes for export.
  - h. To import MARC records from floppy disks, CD-ROM, or online connection.
  - i. To import and export ASCII files
  - j. To add or delete a staff user
  - k. To change a terminal location
  - l. To manage system jobs
  - m. To archive transaction files
  - n. To provide circulation backup
  - o. To accept the tape loading of bibliographic, authority, item, patron, and citation database records.
- 13.5.2 ALAP shall capture relevant elements of the Army library Management Reporting System (to be defined later, but will include attendance, ILL, circ, Acquisitions quantities and costs, and as many of the tabular elements as we can easily define)
- 13.5.3 ALAP shall have the capability to backup data. The system shall provide a program to quickly recover data.
- 13.5.4 Backup of files to tape or some other external storage medium shall be possible while the system is in use.
- 13.5.5 The system shall log transactions to tape or disk on a continual basis so that no transactions or data will be lost in case of system failure.
- 13.5.6 ALAP shall have the capability to output data in standard formats. Specifically, the following are required:
1. write MARC format tapes--of the entire bibliographic database or subsets of the database as determined by library-specified criteria--meeting the current MARC communications standard
  2. write SBIN format tapes--of specified records
  3. produce patron file tapes for export.

- 4. write MARC authority file tapes for export.
- 5. Write COSATI format tapes.

- 13.5.7 ALAP shall have the capability to compile statistical data for reports. The library shall determine the number of years that data will be retained.
- 13.5.8 ALAP shall have the ability to produce daily, weekly, monthly, quarterly, and annual reports, for any 12-month period, including calendar year, fiscal year, academic year, or other designated period.
- 13.5.9 ALAP shall have the capability of importing bibliographic, non-bibliographic, authority, vendor, and patron data from at least tape, CD-ROM, keyboard entry or online source.
- 13.5.10 ALAP shall be able to restore and recover system data including all changes to the database up to the time of a system failure.
- 13.5.11 Depending on the equipment supplied, ALAP shall have the ability to load from and write to floppy disks, 9-track tape, and 8-mm tape.
- 13.5.12 ALAP shall have the following capabilities:
  - a. To revise the library's calendar and hours of operation
  - b. To modify and rewrite OPAC help messages
  - c. To modify the textual content of notices
  - d. To modify the characteristics of the ports
- 13.5.13 ALAP shall have the capability to modify the textual content of notices defined in a profile. Individual libraries shall be able to add, edit, print, and delete text.
- 13.5.14 An authorized operator shall have the ability to modify port characteristics in terms of terminal type, default sub-system, system location, searchable location, user type, connection type, printer type and location, diacritics, display format, and function key set.
- 13.5.15 An authorized operator shall have the ability to modify parameter functional modular parameters, and to modify aspects of the profile; add or edit constants, check-out limit, notices, patron-related items, system-wide parameters, and time-out parameters.

13.6 DOCUMENTATION

- 13.6.1 Complete printed system documentation and user's manuals which detail all operations necessary for the use of the system shall be provided, including at least the following:  
System administrator reference manuals  
Staff users manuals and guides  
Equipment operations manuals  
End-user/patron materials and guides
- 13.6.2 In addition, it is desirable to have the system documents in machine-readable format and loaded as a full-text searchable database on the system.



|                          |   |
|--------------------------|---|
| Access point             | A field or data element which ALAP users can use to locate a given bibliographic record   |
| Acquisition              | The process of selecting, ordering, and procuring library materials, from the moment when an item is desired until the cataloging process begins  |
| Adjacency operator       | A character or character string which allow the user to search for two or more terms in the database which occur with a specified proximity, or in a specific order   |
| ALAP                     | Army library Automation Project; also referred to as "the system;" also, the ISM for automation of Army libraries   |
| Archive tapes            | Back-up media for system and data files   |
| Authority control        | The process by which entries or access points are kept uniform. Also, a method of standardizing names and subject headings. The authority control record file is a list of approved or existing entries, which is linked to the bibliographic files. Authority maintenance allows an authorized operator to change all forms of a term to the approved term. For instance, "Great War," "WWI," "WW I," and "European War, 1914-1918," might all be changed to "World War I, 1914-1918." |
| Automatic connect        | A function within the system which allows the user to connect to a remote system using an easy, quick menu pick rather than keying in a complex telecommunications procedure  |
| Availability information | Status information on a library item such as checked out, on-shelf, lost, etc.  |
| Background mode          | Running a program in a multiprocessing environment which does not conflict with, for instance, OPAC service   |
| Barcode                  | A code of parallel lines of discrete  |

thickness printed on paper and used for fast error-free data entry into a computer system. library systems typically use barcodes both as identifying marks for individual items in the collection and on borrowers' cards (in the systems which use borrowers' cards).

|                       |  |
|-----------------------|--|
| Batch loading         | The processing of data where a number of similar input items are grouped for processing during the same machine run. Entry of a class roster into the borrowers' file would be done in a batch mode.   |
| Bibliographic file    | Formal descriptive information of a collection of library materials, such as books or reports. Generally in MARC format for books or COSATI format for technical reports. May be used to refer to certain kinds of external files, such as journal citation indexes. |
| Bibliographic utility | A nationally available online processing center which provides its clients, usually libraries, with access to a machine-readable database of catalog records. Examples are OCLC, WLN, RLIN.  |
| BISAC/SISAC           | Standard for transmitting ordering information within the publishing industry  |
| Book                  | As used in this document, any item held in a library for use by library patrons. Includes but not limited to books, video tapes, compact disks, software, art, and audio tapes.  |
| Boolean searching     | Method by which a database user may identify desired records. Uses three logical operators: AND, OR, NOT. see also Adjacency operator.   |
| BPI                   | Bits per inch; a standard for measuring data storage on magnetic tape  |
| Branch library        | A unit of a library system. An installation general library would typically consist of a Main library and one or more satellite Branch Libraries.  |

For purposes of this document, any library activity on an installation which is represented in ALAP.

|                         |   |
|-------------------------|---|
| Browse                  | To view and page through a sequence of records; often, viewing and paging through a vertical display of access points.  |
| Call number             | The number assigned to a book which determines its place on the library's shelves. Often, but not always, a unique number within the library's collection.  |
| Cancelling              | Stopping the acquisition of a book  |
| Cataloging              | The general process by which a new item is integrated into a library's collection in such a way that it can later be located by a variety of access points. Also, the process of physically and intellectually describing a library possession, indexing it, and entering that information into a bibliographic record. |
| CCL                     | see Common Command Language   |
| CD-ROM                  | Compact Disk-Read Only Memory. A highly compact method of publishing data. Each 5.25" disk can hold approximately 650 Mb. Many commercial publishers currently sell data and retrieval systems based on CD-ROM.   |
| Check-out               | To charge out library materials to a patron for a specified time period   |
| Circulation             | The management of lending library materials   |
| CJK                     | Chinese, Japanese, and Korean character support in cataloging, OPAC, and terminal input and display.  |
| Claiming                | Follow-up request to clarify the status of materials which have been ordered but have not arrived   |
| Common Command Language | A method of simplifying access to external files. Remote systems have widely varying command languages, which are mostly based on similar principles  |

and have similar commands. The CCL allows the ALAP user to ignore those variant languages and use a single interface for all systems. See NISO Z39.58-199X

|                       |   |
|-----------------------|---|
| Connectivity          | The ability to link remote physical sites via telecommunications  |
| Content designation   | The codes and conventions established explicitly to identify and further characterize the data elements within a record and to support the manipulation of that data. MARC designates content through tags, indicators, and subfield codes. |
| Context-driven        | See Access to External Files, section 4   |
| Copy/item information | Information describing a specific physical piece, such as volume, part, copy, etc., as opposed to bibliographic information, which describes a book but does not tell (for instance) how many copies are on the shelf.                      |
| COSATI format         | A widely used standard for bibliographic description of technical reports. Promulgated by US Committee on Scientific and Technical Information. Used by DTIC.   |
| Customers             | see Patrons   |
| DDN                   | Defense Data Network  |
| Desideratum           | Listing of desired materials  |
| Diacritical mark      | A typographical mark added to a letter to indicate a specific phonetic value  |
| Document              | see Technical Report  |
| Downloading           | Transfer of data between computers  |
| DROLS                 | Defense Research Online System; DTIC's online system for cataloging, announcing, searching, and retrieval of technical reports  |
| DTIC                  | Defense Technical Information Center. DoD-level organization which maintains copies of over 2 million technical   |

reports generated throughout DoD. A primary source of both documents and bibliographic information for Army libraries. cf DROLS, COSATI

|                  |   |
|------------------|---|
| End-user         | A library customer; the person for whom ALAP is ultimately designed. Also, a person who uses library-controlled assets (such as a remote database) without intermediation by library staff. Also called patrons. They may be action officers, civilian or military employees of the supporting organization, eligible family members, or retirees. End-users are all persons other than the library staff who would use the library and therefore need to retrieve information from the ALAP. |
| Export           | Generally, the ability to send records to another system. Specifically to ALAP, the ability to download records in MARC and COSATI formats.   |
| External files   | Bibliographic or textual files, resident in the system, other than the MARC and COSATI bibliographic files which make up the OPAC.  |
| Fixed field      | In MARC, a set of short data elements at the beginning of each record.  |
| Format           | The physical shape, size, and content of library material. See also Book. Or, the data elements and arrangement of data on a screen or printed report.  |
| Full-screen edit | The ability to edit anything visible on a screen display and save changes once. Compare to line edit, in which a save operation shall be made for each line changed.  |
| Full-text        | Files which contain the complete text of materials such as magazine articles, technical reports, regulations, manuals, books, etc. Excludes image files, which contain pictures.  |
| Gateway          | Hardware and software which allow ALAP to connect to remote databases.  |

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| Global change               | Changing all occurrences of a character string in a database with a single operation.   |
| GPO                         | Government Printing Office  |
| Hits                        | When searching a database, items which satisfy the searching conditions   |
| Hold                        | The process of designating a specific item or title for a future operation, as, flagging a checked-out book to be given to a waiting requestor when it returns.   |
| Holdings                    | All the materials owned by a library. For instance, see NISO Z39.44-1986, Serial Holdings Statements for Serials, for guidance in developing serial holdings statements.  |
| ILL                         | See Interlibrary Loan   |
| Image file                  | Digitized images of printed materials created by scanning   |
| Import                      | Transfer data from another computer into ALAP. Usually refers to import of MARC and COSATI records.   |
| Indexing                    | Developing access points by which materials may be searched.  |
| Indicator                   | A character at the beginning of a variable data field containing codes that convey information to interpret or supplement the data found in the field. Each MARC variable data field contains two indicators. NISO Z39.2-1985       |
| Information Center          | Library. For the purposes of ALAP there is no operational difference between libraries and information centers.   |
| Installation                | An Army installation. The geographic area subject to the control of the installation commander, including government housing or supported activities outside the perimeter of the military installation which are satellites to it. |
| Installation Support Module | A standard automation   |

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|                   | package used throughout the Army for common BASOPS functions.  |
| Interlibrary loan | The process of lending or borrowing materials between libraries  |
| Internet          | NREN; a loose national network of computer networks. MILNET is part of Internet.   |
| Inventory control | The process of producing and using management information about utilization of the collection to aid in staff scheduling, selection, weeding, storage, etc.                                |
| Inverted index    | A file structure that facilitates searches for attributes by the provision of sorted lists or indexes.   |
| ISBN              | International Standard Book Number. A highly structured ten-character identifier which is unique to individual books, software packages, audiovisual items, and similar library materials. |
| ISM               | see Installation Support Module  |
| ISSN              | International Standard Serial Number. A highly structured nine-character identifier which is unique to specific periodicals.   |
| Issue number      | A part of a serial   |
| Knowbot           | A program designed to run without little or no operator assistance, which searches among a number of available data sources to locate material desired by the initiator.                   |
| LCCN              | Library of Congress Card Number. Designates the catalog card set or MARC record generated by the library of Congress.  |
| Leader            | First twenty-five characters of a MARC record. Contains elements that allow processing of the remainder of the record. NISO Z39.2-1985   |

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| Library-definable            | Something which can be defined by the library, usually at the installation level or below.  |
| Library site location        | In a multilibrary system, designates which physical site has an item. Within a single library, designates a physical location or separate collection within the library.  |
| Linking                      | The process of attaching copy and item information to a bibliographic record. For instance, designating the barcode number for a given volume, and recording that information such that it is connected to the bibliographic record.  |
| Loan period                  | The length of time an item may be checked-out.  |
| Local E-mail system          | The electronic mail system used by the parent organization of the library.  |
| Location                     | A definable area or collection within a given facility. cf library site location  |
| Lock a record                | Prevent a record from being edited by more than one person at a time.   |
| Logical operator             | One of the Boolean search criteria--AND, OR, NOT. Also, an adjacency operator.  |
| Mandatory field              | In DTIC, a field which DTIC requires before a SBIN record can be completed.   |
| Mapping                      | Matching similar data elements in different data structures   |
| MARC                         | MACHine Readable Cataloging. The American standard for bibliographic description. see NISO Z39.2-1985   |
| Material type                | see Format  |
| Merging of duplicate records | A type of database maintenance. When merging bibliographic data from more than one source, it is common to discover two bibliographic records which appear to describe the same material. Item records may be involved. The operator must delete one of the bibliographic records, but preserve the |



item records.

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| Microform   | Materials stored in microfiche or microfilm. Frequently periodicals or technical reports, but all types of printed materials may be reduced to microform for compactness and preservation.                  |
| Migration   | Transferring the management and operational processes of the library from one system to another.  |
| MMDF2       | US Army Electronic mail standard  |
| Micromail   | An electronic mail system   |
| Monograph   | Book  |
| Native mode | The command language used by a particular system. cf Common command language  |
| Nesting     | The use of parentheses in a search statement to specify priority of execution.  |
| NREN        | National Research and Education Network. cf Internet.   |
| NTIS        | National Technical Information Service. Civilian counterpart of DTIC, but also contains and distributes DoD reports if unclassified and unlimited.  |
| OCLC        | A bibliographic utility used by many Army libraries.  |
| OCLC number | A unique identifier for each OCLC cataloging record. More specific than ISBN, LCCN, ISSN, but relates only to the bibliographic record, not to the book itself.   |
| Officepower | An electronic mail system   |
| OPAC        | Online Public Access Catalog. The computerized catalog that allows library users to search the primary bibliographic files in the system. In the context of ALAP, refers to MARC and COSATI databases only. |

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| Optical disk        | Mass storage medium relying on optical, rather than magnetic, storage of digital information.  |
| Ordering            | Purchasing of library materials. Includes generation of purchase requests or analogous documents whether or not the library has direct purchase authority.   |
| Part                | A physical unit of a book, serial or other format. cf Issue, Physical piece.   |
| Patrons             | Users of the library, not including staff of the library. cf End-users, Users, Customers.  |
| Physical piece      | A physical unit of a book, serial or other format. cf Issue, Part.   |
| Pre-order searching | Before an order is placed, verification that an item is not in the collection or already on order.   |
| Printing            | Directing a report, screen image, or other data to a print device connected to the system. May be a system printer or may be a low-volume printer beside an OPAC terminal.                           |
| Profiling           | The process of selecting the operational defaults for a given library when installing the ALAP. For instance, the system must know the preferred circulation periods for various types of materials. |
| PROFS               | An electronic mail system  |
| Prompts             | System-supplied aids for inputting information or using the system.  |
| PseudoMARC          | A translation of MARC which doesn't maintain the same structure of MARC; as, loading MARC records into a fixed-field database manager.   |
| Realia              | Library materials which are not bibliographic in nature but which are reflected in the catalog and may be circulated, as, toys, tools, museum artifacts, etc.  |

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| Receiving            | Adjusting the system's files for an item to show that it has been ordered and physically received in the library. May require adjusting fund balances, printing receiving reports, and similar accounting actions.  |
| Record directory     | A series of fixed-length entries following the leader in MARC. Each directory entry is twelve characters long, and is made up of a three-character tag, a four-digit length of field portion, and a five digit starting-character-position portion. NISO Z39.2-1985 |
| Relational operators | Symbols or character strings which allow one to search for values equal to, greater than, or less than a given value. cf Boolean searching, Adjacency operators.  |
| Remote database      | A database not resident on the ALAP, but reachable through telecommunications.  |
| Renewal              | The process of extending the check-out period on an item after it has already been checked-out once. Most libraries allow this, but most have limits on the number of renewals.   |
| Rental collection    | A separate collection of books which are rented from a contractor.  |
| Resource files       | Information maintained by the library for many users.   |
| Response time        | The period of time between pressing the "send" or "enter" key and the display of the completed response on the screen. The response times listed shall be accomplished when all terminals are in operation.   |
| RLIN                 | Research Libraries Information Network. A bibliographic utility.  |
| SAN                  | Standard Address Number. A seven-digit code used to standardize addresses in the book industry.   |
| SBIN                 | Shared Bibliographic Information Network.   |

DTIC's program to allow member libraries to create bibliographic information and input COSATI records into the DROLS database.

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| Search              | The process of querying a database by defining a set of parameters which retrieved records must match. In ALAP this usually means a Boolean search, and may involve Search limiting and Adjacency operators. |
| Search limiting     | The ability to limit a database search by specific fields, usually publication date, type of material, language, etc.  |
| Search strategy     | The string of characters or words which defines the hits desired in a database. Sometimes called a Search argument.  |
| See Also references | Notes which suggest alternate access points to a user searching the OPAC or external files.  |
| See references      | Notes which tell a user searching the OPAC or external files that the access point he has selected is not appropriate, but an alternate usage is.  |
| Series              | A set of related monographs.   |
| Shelflist           | A library file which is arranged in the same order as the materials it represents  |
| Site                | A library, information center, or branch library.  |
| Sponsor             | Military member who is responsible for family members  |
| Status              | Where a book is in the system. Common statuses are on-shelf, checked-out, missing, lost, in-processing, on-order, etc.   |
| Stopwords           | Words which are treated as not significant for the purpose of retrieval and are not indexed. Initial articles in titles and author statements are always ignored for purposes of filing.                     |
| Structure of MARC   | cf Leader, Record Directory, Variable  |

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|                   | field, Fixed field, Tag, Indicator, Subfield. see NISO Z39.2-1985   |
| Subfield          | Portion of a MARC field that begins with a subfield delimiter and is terminated by either another subfield delimiter or a field terminator. A section of a tagged field.  |
| System            | In this document, used as a synonym for ALAP  |
| System-wide       | Pertaining to all library sites in the system. Depending on the architecture of the final system, this term may refer to all branches, all sites in an installation or region, or all Army libraries.                     |
| Tag               | Each variable field in a MARC record is identified by a three-character tag, stored in the directory. Tags are the level of content designation used to define independent elements of a record. see NISO Z39.2-1985.     |
| TCP/IP            | Transmission control Protocol/Internet Protocol. A set of protocols used by the Internet to support services such as remote login, file transfer, and mail.   |
| Technical report  | A document generated by a scientific or analytic agency, as distinct from a commercial publisher. Any item described by a COSATI record or included in the DTIC collection.   |
| Template          | A screen display with headings and blanks to facilitate inputting of information. Templates are specifically required to support SBIN input, OPAC input from the keyboard, and acquisitions and serials functions.        |
| Temporary records | Records which are required for a specified time. Rental books, items which have not been entered into the catalog but are being circulated, periodical issues, and certain other materials may require temporary records. |
| Textual files     | see Full-text files   |

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| Translated citations | ALAP shall be able to automatically translate locally-entered citations into SBIN and COSATI formats.  |
| Truncation           | In searching, the ability to search a word stem and retrieve all occurrences of its variants. For instance, JOHN? would retrieve JOHNSON, JOHNSTON, JOHNNIE, JOHNS, etc. Both left and right truncation is required.   |
| User                 | see Patrons  |
| USMARC               | see MARC   |
| Variable field       | MARC tags 001-009 and potentially 00a-00z. Control fields do not have indicators or tags and can be composed of one or more data elements. Every element except the last one in a variable field must be fixed-length, since elements are identified only by their position in the field.  |
| Virtual library      | A concept of library service in which the physical location of materials is less important than the knowledge of where information is, and how to retrieve it. The concept is associated with extensive use of full-text, remote, and external databases; and frequent interlibrary loan and reciprocal exchange of materials among libraries. |
| Virtual workspace    | Disk space set aside by the system for a specific task, which appears to the user to be his alone. OPAC users will require virtual space in which to create and modify bibliographies. This is subject to stringent controls by the system administrator.  |
| Volume               | A physical unit of a book, serial or other format. cf Issue, Part, Physical piece.   |
| WLN                  | Washington Library Network. A bibliographic utility.   |
| X5400, X.400         | Standards relating to electronic mail.   |
| Wild-card character  | In searching, a character which can be   |

used to represent any character. For instance, CO#N would retrieve COIN, COHN, CORN, CONN, etc.

## NISO Standards Price List

All listed standards are available from Transaction Publishers, Department NISO91, Rutgers University, New Brunswick, New Jersey 08903; (908)932-2280; FAX (908)932-3138. Add \$3.00 shipping and handling for the first standard and .75 for each additional standard. The ISBN prefix is 0-88738.

| <i>Number</i>      | <i>Title</i>   | <i>Price</i> | <i>ISBN</i> |
|--------------------|--|--------------|-------------|
| Z39.22-1985        | Bibliographic Information Interchange  | \$20.00      | 998-8       |
| Z39.4-1984         | Basic Criteria for Indexes   | 20.00        | 997-X       |
| Z39.5-1985         | Abbreviations of Titles of Publications  | 20.00        | 996-1       |
| Z39.6-1983         | Trade Catalogs   | 20.00        | 995-3       |
| Z39.7-1983         | Library Statistics   | 25.00        | 994-5       |
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| Z39.18-1987        | Scientific and Technical Reports-Organization, Preparation, and Production                   | 20.00        | 984-8       |
| Z39.20-1983        | Criteria for Price Indexes for Library Materials   | 20.00        | 982-1       |
| Z39.21-1988        | Book Numbering   | 30.00        | 951-1       |
| Z39.22-1989        | Proof Corrections  | 30.00        | 949-X       |
| Z39.23-1990        | Standard Technical Report Number: Format and Creation  | 20.00        | 946-5       |
| Z39.26-1981        | Advertising of Micropublications   | 20.00        | 976-7       |
| Z39.30-1982        | Order Form for Single Titles of Library Materials in 3-Inch by 5-Inch Formats                | 26.00        | 973-2       |
| Z39.31-1976(R1983) | Format for Scientific and Technical Translations   | 20.00        | 972-4       |
| Z39.33-1977(R1988) | Development of Identification Codes for Use by the Bibliographic Community                   | 20.00        | 970-8       |
| Z39.39-1979(R1988) | Compiling Newspaper and Periodical Publishing Statistics                                     | 20.00        | 966-X       |
| Z39.40-1979(R1987) | Compiling U.S. Microform Publishing Statistics   | 20.00        | 965-1       |
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| Z39.44-1986        | Serials Holdings Statements  | 40.00        | 962-7       |
| Z39.45-1983        | Claims for Missing Issues of Serials   | 20.00        | 961-9       |
| Z39.46-1983        | Patent Documents-Identification of Bibliographic Data  | 20.00        | 960-0       |
| Z39.47-1985        | Extended Latin Alphabet Coded Character Set for Bibliographic Use (ANSEL)                    | 20.00        | 959-7       |
| Z39.48-1984        | Permanence of Paper for Printed Library Materials  | 20.00        | 958-9       |
| Z39.49-1985        | Computerized Book Ordering   | 30.00        | 957-0       |
| Z39.50-1988        | Information Retrieval Service Definition and Protocol Specification for Library Applications | 35.00        | 953-8       |
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| Z39.53-1987        | Codes for the Representation of Languages for Information Interchange                        | 30.00        | 955-4       |
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| Z39.61-1987        | Recording, Use, and Display of Patent Application Data                                       | 35.00        | 952-X       |
| Z39.63-1989        | Interlibrary Loan Data Elements  | 48.00        | 950-3       |
| Z39.64-1989        | East Asian Character Code for Bibliographic Use  | 40.00        | 947-3       |